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Greywater systems

Can you use your greywater to become a green citizen? CHOICE checks it out.



Dishwashers

Most new models wash plates well, but some don't make the grade when drying.

On test

- + Home theatre
- + Dishwashers
- + Car GPS
- + Folding bikes
- + Micro hifi systems
- + VoIP phones
- + Hair straighteners
- + Fridge thermometers

Strawberries

Pesticide residues: who's checking?



106% home loans? Yes, but it's buyer beware...

Skin cancer clinics — can you really trust them?

How to stay healthy while you travel overseas

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RATED!

Save \$\$\$ with VoIP: CHOICE covers everything you need to know to slash your phone bills

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How CHOICE helps you. CHOICE gives you the power to choose the very best goods and services, and avoid the worst. Because we pay full price for the products we test, we can remain 100% independent. We don't take advertising and we don't accept freebies from industry — our only aim is to give consumers the best possible information about buying products and services. Our income is only from subscriptions to our magazines and choice.com.au, and from other services we supply for the benefit of consumers. We're not a government body and we don't receive government funding.

We have laboratories in Marrickville, Sydney, that test everything from juicers to plasma TVs, coffee grinders to MP3 players and air conditioners. We test hundreds of products every year. There's no hidden agenda to our testing — we simply road-test products so that consumers like you don't get ripped off. CHOICE ratings are based on lab tests, expert assessments and consumer surveys.

CHOICE also has staff who research a wide range of consumer services — everything from the financial industry to the organic food business, supermarket practices to drug companies and pharmacies. They reveal the truth behind the facts and figures, and investigate quality and claims.

CHOICE has also always campaigned about consumer goods and services that affect your life. We lobby government and regulators on behalf of all consumers in Australia. CHOICE was established in 1959 and is a not-for-profit, non-party-political organisation.

CHOICE Best Buy

**BEST
BUY**

CHOICE nominates a product as a Best Buy if it delivers high quality at a comparatively low price. Not every test report has a Best Buy.

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Comment

Unfair contracts



The finance contracts we sign should be fair, reasonable and protect our rights. But home loan contracts are complex and, as CHOICE found out, the industry is complacent about terms and conditions that give the lender broad rights, to the detriment of the borrower.

This issue of CHOICE analyses a range of 'alternative' finance products that recently became available in the residential home finance market (page 17). Some pay your HECS debt as well as your home loan, others require no deposit, and 'shared equity' products see a third-party financier take a share in any improved value of your home.

The majority of housing finance contracts are in a standard form, presented on a 'take it or leave it' basis with non-negotiable terms and conditions. Standard terms sometimes include quite unreasonable conditions, such as unacceptably broad default terms. The unreasonable terms and conditions that persist in mainstream mortgage contracts were also in many of the alternative home finance contracts we reviewed.

Existing laws provide individual consumers with legal remedies where a lender engages in unconscionable conduct that unfairly exploits a consumer's vulnerability. But currently there's no protection where the process used to sell a home finance product is legitimate, but the contract itself is unfair. Consumers and regulators should be able to challenge contract terms and conditions and insist on fair contracts. Fair consumer contracts generate trust in the marketplace and empower consumers to exercise their rights and preferences.

CHOICE wants the Commonwealth Government to introduce new laws to ensure fair terms and conditions in all consumer contracts, and this is one of the challenges we've presented to the new Minister for Competition Policy and Consumer Affairs. In the last issue we called on the newly elected Commonwealth Government to prioritise consumer concerns by creating this ministerial portfolio. We're pleased that it's done exactly that and we look forward to working to promote the interests of consumers with the Honourable Chris Bowen, the newly appointed Minister. ■

Ann Friis
Editorial Director

CAR GPS TEST
PG 48

On test

- 36 + Home theatre systems** Disappointing sound even for \$1500-\$2000.
- 40 + Dishwashers** Most new models wash well, but not all cut it drying.
- 44 + Folding bikes** What are they like to ride?
- 48 + Car GPS** It's all good news: more features, lower prices.
- 52 + Micro hifi systems** Simple and neat but not all have good sound.
- 55 + Hair straighteners** You'll need to spend at least \$80 for a good one.
- 58 + Dual-mode cordless phones** How to get landline plus cheap VoIP calls.
- 62 + Fridge thermometers** Getting the temperature right matters.



CHOICEextra.com.au

This is a free website for CHOICE magazine subscribers. It's an index of articles going back to Jan/Feb 2002, with links to PDFs so that you can read many of them immediately. You log in with your subscriber number, which is above your name on the mailing label that comes with the magazine.

+ HAZARDOUS CHEMICALS

iPhone contains toxic materials

"Apple is far from leading the way for a green electronics industry. Competitors already sell mobile phones free of PVC."



APPLE

A Greenpeace report reveals that the APPLE iPhone contains several hazardous chemicals. Toxic brominated compounds were found at levels of up to 10% in the phone's circuit board and antenna, indicating the presence of flame retardants that are known to be harmful.

Greenpeace is also concerned about high levels of phthalates in the PVC of the iPhone's headphones. These chemicals are said to interfere with sexual development in mammals and are classified 'toxic to reproduction' in Europe.

The test results come just months after a promise by Apple CEO Steve Jobs to surpass its competition on environmental issues. According to Greenpeace, competing mobile phone companies have already removed such chemicals.

Greenpeace International says, "Apple is far from leading the way for a green electronics industry as competitors, like Nokia, already sell mobile phones free of PVC."

Apple's response was that the chemical levels in its products comply with government standards: "iPhone complies with ROHS [Restriction of Hazardous Substances], the world's toughest restriction on toxic substances in electronics." The company says it will voluntarily eliminate the use of BFRs and PVCs by the end of this year.

Based on the report's findings, Californian industry watchdog The Center for Environmental Health has filed suit against Apple, arguing that the company has violated state law by not disclosing the toxic chemicals on the iPhone's packaging. ■



UPDATE CONSUMER NEWS CHOICE, November 2007

In *Complaining made much easier*, page 7, we printed a different phone number for the Financial Co-operative Dispute Resolution Scheme from the other financial dispute resolution schemes mentioned in the article. It now has the same phone number: 1300 780 808.

Unit pricing makes it much easier for consumers to compare prices across products.

+ CONSUMER WIN



Aldi leads way with unit pricing

In November last year Aldi became the first supermarket in Australia to introduce unit pricing, with the company making the switch

across its 153 stores. Already widely used in the US and some European countries, unit pricing means a product's cost per unit of measurement (for example, per 100 g, per kilogram or per litre) is displayed alongside its retail price. This pricing system makes it much easier for consumers to compare prices across products.

Currently, Australian supermarkets must show the unit price for meat, fruit and vegetables, which are sold by weight, but aren't required to show one for packaged goods. Aldi has adopted the system voluntarily, based on UK regulations.

Already using unit pricing in its New Zealand stores, Woolworths has confirmed plans to roll out its first trials in Australia. "Our customers have found unit pricing to be an easy and effective way to compare prices throughout the supermarket," Woolworths told CHOICE. "We are working on introducing unit pricing to our Australian supermarkets and we hope to introduce a trial of unit pricing into several stores during the early part of 2008."

In the absence of a legislative framework in Australia, CHOICE has called on other supermarkets to follow Aldi's lead and adopt unit pricing. For unit pricing to be most useful for consumers, there needs to be a standard system across all supermarkets. Despite this, CHOICE is delighted to see Aldi introduce unit pricing — we've been fighting for it for consumers for many years. ■

+ TAX-FREE LUNCH

FREE?



No such thing...?

There may be no such thing as a free lunch, but if you play your tax cards right you can probably come close.

You may have heard of salary sacrificing for an office car or a laptop. But did you know you can do the same thing for an office lunch?

Paying for lunch with pre-tax dollars has been growing in popularity in the last few years. The idea is that your employer provides the meals through an in-house canteen or contract caterers and you can order anything (except alcohol) as long as it's consumed in the workplace during normal business hours. In most cases, workers are issued with a 'smart card' into which they can upload credit and make food purchases using their pre-tax pay.

Employees too busy to leave their desks during lunch can save on both the amount of individual marginal tax they pay and their 1.5% Medicare levy. So if you spend \$10 a day on work lunches and you're on an marginal tax rate of 31.5%, there's a potential saving of \$756 each year. And the incentive for your employer? Aside from the obvious benefit of boosting staff morale, all the meals purchased are exempt from Fringe Benefit Tax.

Accounting giant KPMG said there's been a huge increase in the number of organisations making tax-free lunches available in the last few years. "A lot of people have been frightened of the concept in the past," a spokesperson said, "But now with companies like EzyBite and Smart Salary, the industry providing tax-free lunches is gaining momentum."

Convenience is also a big selling point for the tax-free lunch programs. In a recent survey conducted by Hays Recruitment, over half the respondents said they don't leave their offices during lunch. Most of the contracted caterers now have online menus that allow deskbound workers to order and pay for their lunches with the click of a mouse.

Flexi Meals is a company that provides salary-sacrificed meals to clients such as Macquarie Bank and NRMA. It says its service frees people's lunchtime to do more useful things: "The convenience of having cashless payment and having what you want custom-made and delivered into the office is a big driver."

To find out more about pre-tax office meals, go to:

- www.ezybite.com.au.
- www.fleximeals.com.au.
- www.sustenance delivered.com.au. ■

+ FIGHT THE FLAB

Australia's expanding waistline

Two recently published international studies have highlighted Australia's position as one of the fattest nations in the world.

A report compiled by the Organisation for Economic Cooperation and Development (OECD) found that 21.7% of Australians have a body mass index (BMI) over 30, which is defined as obese. Australia has the fifth highest adult obesity rate of OECD's 30 member countries, behind the US (32.2% with a BMI over 30), Mexico (30.2%), the UK (23%) and Greece (21.9%).

Even more alarming was the finding that while the rate of obesity has more than doubled over the past 20 years in the US, it has almost tripled in Australia.

In a separate study, 168,000 patients in 63 countries (not including the US), who went to their doctor for any reason on a specified day, were invited to participate in the research, which looked at two measures of fatness: waist circumference and BMI. The patients were evaluated and the presence of known cardiovascular disease or diabetes was recorded, to provide a one-day global snapshot of health, referred to as the International Day for the Evaluation of Abdominal Obesity (IDEA).

In all regions except southern and eastern Asia, more than 60% of male participants and more than 50% of female participants were overweight or obese. Waist circumference was also high — 56% of men and 71% of women carried too much weight around their middle.

Among men and women who took part in the study, BMI and particularly waist circumference were both strongly linked to cardiovascular disease and especially to diabetes. Women with a waist circumference bigger than 88 cm, for example, were almost twice as likely to have cardiovascular disease and almost four times more likely to have diabetes mellitus than women measuring less than 80 cm. The average waist circumference of Australian women was 89 cm. Each additional centimetre increased risk, even after accounting for BMI. ■

CORRECTIONS

① COUNTERFEIT PERFUMES CHOICE, Dec 07/Jan 08

They're so good we mixed them up ourselves! The 'answer' on page 32 said the fake Davidoff Cool Water perfume in the photo on page 31 was on the right — in fact it was the one on the left.

② CAR INSURANCE CHOICE, November 2007

In the table on page 34–35:

- **Choice of repairer** Should be 'yes' for GIO and SUNCORP METWAY.
- **Free no-claim bonus protection after 12 months** Should be 'yes' for GIO and 'after two years' for CGU and SUNCORP METWAY.
- **Updated policy scores following these changes** 88% for SUNCORP METWAY and 86% for GIO.

+ NEXT G

Court finds Next G ads misleading

Telstra was found to have misled customers about the coverage of its Next G network in a recent Federal Court ruling.

The ACCC encourages consumers to raise concerns about poor coverage or unsuitable handsets with Telstra.

In a series of TV ads, brochures and newspaper ads, Telstra claimed that the Next G network covers 98.8% of the population and the service should be as good as or better than the CDMA network. The Australian Competition and Consumer Commission (ACCC) disputed the claim, alleging that Telstra engaged in "misleading or deceptive conduct" in promotions saying the Next G network provides "coverage everywhere you need it".

The court found there were significant factors affecting the network coverage that weren't clearly spelt out in Telstra's marketing. Justice Michelle Gordon said while Telstra's ads conveyed that consumers could use the Next G network regardless of where they were and what handset they used, there were key qualifications affecting the coverage that couldn't be easily inferred from the ads.

"Whether a user could obtain coverage depended in part upon where that person was, what handset that person was using and in some cases whether that handset had an external antenna attached," Justice Gordon said.

The court also found that Telstra breached sections of the Trade Practices Act by creating an impression that Next G coverage was the same as or better than CDMA coverage.



ACCC chairman Graeme Samuel urges consumers to raise any concerns about poor Next G coverage or unsuitable handsets with Telstra. "It is incumbent on Telstra to provide relief to consumers who've been misled into purchasing Next G handsets and services which don't deliver the promised coverage performance," he said. "One would hope that Telstra will adopt a proper commercial and ethical stance and deal with complaints in a proper way."

The regulator will seek injunctions preventing further similar representations, and orders requiring Telstra to publish corrective advertisements.

Telstra spokesperson Peter Taylor said the company stands behind its advertising and intends to appeal the "very disappointing decision". He argues the telco's marketing campaign should be viewed in context. "Do people really believe Vegemite puts a rose in every cheek? By the same token, we never said the Next G network covered every square inch of Australia," Mr Taylor said.

"The facts are that Telstra's Next G network ... provides coverage to 400,000 more square kilometres of Australia than CDMA and is the fastest national mobile network in the country. That's what our advertising says." ■

+ STOPPING SUPERBUGS

Doctor's long-sleeved coats banned

In a bid to stop the spread of 'superbug' MRSA (methicillin-resistant *Staphylococcus aureus*) in hospitals, doctors' iconic long-sleeved white coats have been banned across the UK's National Health Service.

Staphylococcus aureus bacteria are found on the skin and in the nose. Although they're usually harmless, they have the potential to cause infection and serious illness — even death. Most at risk are the elderly and those in intensive care. Some strains of the bug have become resistant to the antibiotic methicillin and other antibiotics, making infection difficult to treat.

Ministers in the UK believe the bug has been spreading from one patient to another on the cuffs of doctors' white coats and say a policy of 'bare below the

elbows' will ensure good hand and wrist washing. Also banned are wristwatches, jewellery and long-sleeved shirts, and doctors are also advised against wearing ties. These changes were to take effect in January 2008.

Should Australian hospitals follow suit? Professor Peter Collignon, director of the Infectious Diseases Unit and Microbiology Department at the Canberra Hospital, told CHOICE that banning the coats in Australia probably wouldn't make much difference as not many doctors wear them here anyway.

However, a Melbourne study suggests that dangling ID tags, badges and straps worn by clinicians may harbour the MRSA bug; the researchers have called for badges and lanyards to be regularly cleaned and disinfected. ■



+ FREE-RANGE PORK

Telling porkies?

Ever get confused about the difference between free-range and free-range-bred pork? As far as the Australian Competition and Consumer Commission (ACCC) is concerned, you just don't need to know.

The ACCC was asked to investigate a complaint about misleading advertising by two pork producers, who promoted their products as 'free-range', when technically they're 'bred free-range'. Free-range-bred piglets are born outdoors, to mothers that live in the open, but once weaned at about three weeks they're moved into sheds or shelters to be fattened up on their journey to your dinner plate.

According to the Free Range Pork Farmers Association (www.freerangepork.com.au), the definition of free-range is that the pigs should have the freedom to forage on the land, and not be hindered by cages, stalls, tethers or confined yards. They should be able to, among other things, "graze on pasture during the day, experience sun, rain and wind, be free to express instinctive behaviour, be free from fear and distress, and be free from hormones, growth promotants and antibiotics". While free-range pork producers agree that free-range-bred is a humane method of raising pigs, they think consumers are entitled to know the difference and know exactly what they're buying.

Supporters of more conventional farming methods argue that it's not in the interest of the pigs to farm them free-range all the time. They think it's better for them to be protected from the elements.

Wherever you stand on the issue of free-range versus conventional farming practices, the ACCC has decided that consumers aren't savvy enough to understand the difference between free-range and free-range-bred, and therefore they couldn't be misled by the incorrect 'free-range' claims.

CHOICE agrees that while 'free-range-bred' may be accurate, it's not instantly understandable, and consumers would benefit from a more meaningful term. But not to be told at all that there's a difference between the two terms removes their ability to make a choice. ■



+ EMOTIVE MARKETING

Baby blood banking

“Storing your baby's umbilical cord blood is an investment in your baby's future”

This emotive phrase and the others below, taken from marketing brochures for private cord-blood storage banks, are designed to strike a chord with worried expectant parents. And the marketing appears to be working. To date, thousands of Australian parents have each spent thousands of dollars depositing their baby's cord blood with private banks, 'as insurance' against future disease. But is it money well spent?

Cord blood is the baby's blood that remains in the placenta and umbilical cord after birth. It contains stem cells that can be stored and used later for transplants for children and young adults with certain blood, immune and metabolic diseases.

“It was their lifeline during pregnancy. It can be again”

You can store cord blood specifically for your child or another family member in a private bank. But it's not cheap — processing and storage for 18 years can cost from around \$2700 to more than \$5000, depending on the bank (there are currently four private banks in Australia) and payment option you choose. And many experts aren't convinced that private banking is worth doing.

The most common reason for transplantation in childhood is for leukemia, but a donor's own cord blood is unlikely to be used. The most appropriate source of stem cells is from another person, whether it's another family member or an anonymous stem cell donor. In fact, estimates for the likelihood of using cord blood collected for private use range from 1 in 2500 to over 1 in 200,000.

“You can't foresee your family's future, but you may be able to change it”

Some scientists claim there's potential for cord blood to be used to cure diseases such as Alzheimer's and Parkinson's and conditions such as diabetes. They also say cord blood could be used to treat diseases affecting the brain, heart and spine. While it's possible that in the future such diseases will be treated with cord blood, experts say that at present much more research is needed.

The alternative to private storage is to donate cord blood to a public bank, of which there are three in Australia. Donation is voluntary and collection and storage are free of charge (although collection can only take place in a limited number of hospitals). Public banks store cord blood for use by suitable recipients anywhere in the world, ensuring fair access for all patients with diseases such as leukemia who require stem cell transplantation. That includes your own family.

If your cord blood is donated to a public bank, it's estimated that in 10 years' time the chance that it will still be in the bank is around 85%. If there's a need for you or a family member to use it, it's available.

For details of the Australian national network of cord-blood banks and hospitals that participate as cord-blood collection centres, go to the Australian Bone Marrow Donor Registry: www.abmdr.org.au/auscord.htm ■

+ CONSUMER CONFUSION

Offsets galore

Carbon offsets for car loans, outback coach tours, broadband — the growing range of products and services claiming to neutralise or reduce your carbon emissions is a consumer confusopoly.

One company even promises to calculate and offset the methane emitted by your family cat — but what does it all mean?

Which of the following is the greener car loan, would you say?

- NRMA's Green Car Loan, which is available only for cars with a greenhouse rating of seven or higher from www.greenvehicleguide.gov.au, but offsets emissions for only the first year of driving; or
- MECU's goGreen car loan, which offsets emissions for the life of the loan (up to seven years), but is available for any vehicle — with an interest rate discount for choosing a car with a greenhouse rating of six or higher.

It's hard to judge, especially because the offsets are based on an average car driven an average distance, not how much your car will be driven.

As CHOICE has pointed out in the past, the offset market is largely unregulated. It's hard for anybody to compare products or judge which are of good quality. This is especially true with so many methods of creating an offset, from giving away energy-efficient light globes to tree planting or investing in renewable energy.

The global Voluntary Carbon Standard could help sort this out, but it's fairly new and, as its name suggests, voluntary. The market for carbon offsets will probably get more confusing before it improves.

The 2007 V8 Supercars series is a good example of offsets shutting the door after the environmental horse

has bolted. Organisers claim it's green as they're planting more than 15,000 trees in Australia and using 5% renewable ethanol (conveniently enough, a high-octane fuel) in the cars. It's better than doing nothing, but cynics might question how sustainable it is to wave around a carbon offset claim while your event churns through litres of non-renewable petrol. Pollution is contributing to global warming now, while planting trees takes decades to soak it all back up.

In our November 2007 article on going carbon neutral, CHOICE outlined these steps:

- Measure your emissions.
- Reduce them.
- Opt for accredited GreenPower.
- Finally, offset, to mop up the remaining emissions you really can't avoid.

Watch out for doubling up — you don't need to offset your broadband if you've already paid to offset all your electricity emissions, or have 100% accredited GreenPower. Likewise, taking out carbon neutral car insurance is unnecessary if you've already bought offsets from another provider for your car emissions.

Not producing a lot of greenhouse emissions in the first place is the most responsible option — plus it frees you from having to choose among heaps of unregulated and potentially confusing carbon offsets. ■

The offset market is largely unregulated — it's hard for anybody to compare products or judge which are of good quality.

CHOICE



+ COMPENSATION FIGHT

ASIC fights for Westpoint investors

The Australian Securities and Investments Commission (ASIC) has begun legal action on behalf of over 3000 Westpoint investors who lost their savings when the property development group collapsed in late 2005.

The regulator will use its powers under the ASIC Act to chase up to \$342.6 million worth of compensation from former Westpoint directors and officers, a trustee and several financial planning companies that sold Westpoint investments. If successful, the proposed legal action could benefit 85% of investors who suffered financial losses as a result of their failed investments.

"Westpoint is one of those cases where ASIC believes the conduct of those involved fell short of what the law expects," ASIC said. "We consider there is a clear public interest in using ASIC's powers to pursue compensation for Westpoint investors."

In the first phase of its legal actions, ASIC will seek to recover damages from five former Westpoint directors and executives for allegedly misapplying funds raised. It will also sue five financial planning firms for their alleged failure to comply with industry and legal requirements by selling products with the risk and financial characteristics of Westpoint. The second phase involves two financial services licensees and a trustee, and seeks \$34.4 million in damages.

ASIC's move is expected to offer some relief to small investors who suffered heavy losses in the Westpoint collapse and help re-establish consumer confidence in investment markets. ■

+ ID FRAUD

Facebook identity theft

Facebook, the online social network that's swept the globe, has become the modern way to stay connected with friends and family — but revealing too much personal information may leave you vulnerable to identity fraud.

Only accept 'friend requests' from people you know and trust. Make sure only real friends can see your details.

To show just how easy fraud can be, UK consumer TV show *Watchdog* set up a Facebook profile for a fictional character called Amba Friend. Amba then sent out 100 friend requests to other users, of whom 35 accepted.

One of her new friends, Scott Gould, revealed to Amba in his profile, among other things, his date of birth. *Watchdog* was then able to collect enough personal details through an internet search to successfully apply for an online bank account and credit card in Scott's name.

So how do you protect yourself? "You don't put down your full name, date of birth and your address — that's just ridiculous," says Sydney forensic accountant Brett Warfield, who specialises in identity fraud. The less information that potential fraudsters can get their hands on, the better. It may seem overcautious, but identity fraud is big business — 80,000 cases were reported in the UK in 2006.

When setting up a Facebook account, take advantage of the privacy controls — you want to make sure it's only real friends who can see your details. And only accept 'friend requests' from people you know and trust. ■

+ FOOD ADVERTISING

Kids are advertising pawns

Claims that TV advertising has a bad effect on children's eating habits aren't new, but TV isn't the only medium that targets kids. A new study by the Cancer Council NSW examines the effect exposure to food advertising and marketing in magazines could have on what kids eat.

The World Health Organisation (WHO) has identified food marketing as a probable cause of the increase in children being overweight or obese. TV has been the main focus of concern, with print media such as children's magazines being largely ignored.

The Cancer Council NSW assessed food marketing to kids in 16 magazines popular among children and young adolescents, such as *K-Zone*, *Disney Adventures*, *Girlfriend*, *TV Hits*, *Smash Hits* and *Dolly*. As well as ads, researchers counted food references in editorials, competitions, activities and recipes, including pictorial and written references. They then divided them into healthy and unhealthy foods.

References to unhealthy foods were significantly higher than to healthy foods. Ice cream, chocolate and confectionery, fast-food restaurant meals and baked products such as

cakes and biscuits were the most represented unhealthy foods. Foods classed as unhealthy had more references to brand names, whereas when healthy food options were mentioned, they tended to be unbranded items such as fruit and vegetables.

References to unhealthy foods were more concentrated in magazines aimed at boys and kids aged 7–12. Research suggests this could be because girls' magazines contained more recipes (with healthier ingredients) and information on dieting, often referring to low-fat products, fruit and vegetables.

The conclusion of the study is that while TV ads, especially in children's viewing times, should remain the focus of stricter regulation, the lack of regulation of ads in magazines is a problem too, and requires tighter controls to be implemented immediately. ■

In brief

Join the big clean-up

The annual Clean Up Australia Day will be held this year on 2 March. To date, Clean Up Australia Day has collected enough waste to fill 4.7 million household wheelie bins. Do your bit for the environment by organising a Clean Up site, or volunteer to join an existing site. To sign up, simply register at cleanup.org.au.

**Clean Up Australia
2 March**

Gym music cost to rise

The cost of having music while you work out could go up by more than 3000%. The Phonographic Performance Company of Australia has applied to the Copyright Tribunal to increase the licence fees for playing songs during gym classes. The hearing will go before the Tribunal in the middle of this year and the current fee of 94.6 cents per class could go up to \$31 — which may translate to an increase in costs for you.

Fluoride for Queensland water supply

Queensland will finally join the rest of the country in adding fluoride to its water supplies, with the aim of improving dental health. The \$35 million program will see 50% of Queenslanders drinking fluoridated water by the end of 2008, completing the rollout by 2012. Until now, only Townsville in Queensland had fluoridated water — boasting a 65% lower tooth decay rate in children than Brisbane.



+ MEDIA PLAYER

A Touch of glass

Like the iPod Classic (right), the iPod Touch is another step in the evolution of Apple's ubiquitous media players. Taking its name from the glossy glass widescreen touch-sensitive display, this iPod cuts the ties to your computer, using direct wireless (Wi-Fi) access to the iTunes Music Store, web browsing and internet video.

As you might expect, most navigation is done with a touch, swipe or flick of a finger. Or two fingers — you can resize images or web pages by simply pinching or opening your fingertips on the screen.

There are standard touchable onscreen buttons for all the functions you'd expect, plus iTunes, Safari web browser and YouTube player. There's also room for two extra rows of icons, for future programs.

Videos display in landscape mode, with transparent navigation and volume slider controls that appear and disappear — you guessed it — at a touch. Impressively, the Touch always knows which way is up and rotates photos, music albums and web pages to suit.

Unlike with previous iPods, you can now edit contact and calendar entries directly, using the onscreen keyboard. A new operating system based on APPLE's OS X also opens up scope for future expansion of the Touch's capabilities.

The Touch is sleek — just 8 mm thick and weighing only 120 g, largely thanks to the use of solid-state flash memory, instead of the internal hard drive of the iPod Classic. This limits storage space to either 8 GB (for \$419) or 16 GB (for \$549) but helps give a claimed battery life of 22 hours for music or five hours for video.

Unfortunately the Touch doesn't ship with a protective case or handle and the scratch-resistant glass can crack easily if dropped.

You can find out more about the iPod Touch in the January/February 2008 issue of CHOICE Computer. To subscribe, call 1800 069 552 toll-free or go to choice.com.au/magazines. ■



APPLE iPod Touch

Price \$419 (8 GB), \$549 (16 GB)

Contact www.apple.com/au

The Touch always knows which way is up and rotates photos, music albums and web pages to suit.

+ MP3 PLAYER

Classic performance



APPLE iPod Classic

Price \$479 (160 GB)

Contact www.apple.com/au

The APPLE iPod Classic is a smart-looking new MP3 player with a larger capacity and a wealth of features that was released — a little too late for the CHOICE Dec 2007/Jan 2008 MP3 player test — to replace last-generation video-capable iPods.

It's available with a large 80 or 160 GB hard drive; we tested the latter (\$479 recommended retail). It's

claimed to store up to 200 hours of video, making it the iPod of choice if you want to watch a lot of visual content on the go — catching up with last night's recorded TV show while you're commuting by train, for example.

Apart from playing music and watching videos or photo slideshows, you can also use the iPod Classic as an external hard drive for Macs or Windows PCs. It has three games installed, a clock you can set to display the time in different time zones and an alarm/timer/stopwatch with various options.

It'll also let you access diary and contact info you've sent to it from your Mac or Windows PC — but don't throw your diary and address book out yet. Unfortunately you can't record changes directly; data needs to be sourced from an external application. However, in the Mac OS X environment, information from the address book and iCal can be 'synced' (it'll synchronise your information updates upon request).

The APPLE iPod Classic compared very well with the other MP3 players we tested for last December's report. With an overall score of 84%, 86% for sound quality and 92% for battery life, it would have come second in that test of digital music players (only surpassed by APPLE's flash player, the iPod Nano) — and it's also much better than the other two hard drive models we tested. Initial setup, ripping, encoding and transferring tracks are all very easy.

Its high-resolution LCD screen is adequate (6.3 cm) for watching videos, though slightly smaller than the one on the iPod Touch (8.75 cm), reviewed on the left.

On the downside, it's relatively heavy (170 g including earphones) and has neither a strap nor a clip, so could fall quite easily out of a shirt pocket if you're bending down. And there's no remote control, which would come in handy for playback on the move. ■

+ AIR MOUSE

Mouse takes flight

Looking more like a space-age remote control than a computer mouse, the MX Air Mouse works very well as an optical wireless mouse on the desktop — but pick it up and it transforms into a multimedia wand.



Logitech MX Air Rechargeable Cordless Air Mouse

Price \$229

Contact www.logitech.com

The package consists of a mouse, USB receiver, docking station/recharger and software DVD. Insert the receiver into a USB port, turn the mouse on and you're up and running.

The mouse performed flawlessly on the desktop, tracking and running smoothly across the desk surface. Its symmetrical shape makes it comfortable for right or left-handed users, with the standard left and right mouse click buttons within easy reach of the index and middle finger.

When you lift the mouse up off the desk, two bars under the left and right buttons light up to indicate that it's in aerial mode. In the air the mouse is cupped in the palm of the hand, which makes all the keys easily accessible to the thumb. At first you may find it disconcerting to control a cursor on the screen by waving your hand around, but it takes no more than a few moments to make the adjustment.

Its slim profile allows you to comfortably hold the mouse as you would a remote, with electronic motion detectors keeping your mouse pointer in the right position on the screen. The MX Air Mouse is an ideal tool for looking movies on a Media Centre

PC or controlling a PowerPoint presentation in the boardroom, as it gives you complete control over the presentation from more than 10 metres away.

A touch-sensitive scroll control performs the tasks normally assigned to the wheel on a mouse. Slide your finger along the panel to move up and down a web page or flick through an office document.

Four additional keys for back, select, play/pause and volume are situated along the spine of the mouse and can be reassigned to other tasks using the supplied software. You can select from a list of 23 actions, such as copy, paste, undo and so on, or you can enter a keystroke combination when using it on a Windows XP/Vista computer.

For more precise work, such as photo retouching or layout work, simply put the mouse back on the desktop for pinpoint-fine control.

We found browsing the web on the desktop and in the air a breeze and the volume control perfectly suited for multimedia playback. To control volume in aerial mode, you simply hold down the volume button and wave the mouse from side to side.

The mouse works on Windows XP/Vista machines as well as on an Apple Mac computer using OSX, although you can't change the keystroke combinations when using it on an Apple Mac. It also works on the Sony PlayStation 3 gaming console, but the menu functionality is fairly limited, particularly with gameplay.

The mouse worked extremely well on a Windows Media Centre PC when navigating through menus and playing media files.

If you own a Wii games console, you'll love this mouse, as the concept is very similar to the Wii remote gaming control.

It may be relatively expensive, but the MX Air Mouse delivers a soaring multimedia performance. ■

Coming

PVRs with two tuners

A PVR (personal video recorder) is a digital TV tuner — or in this case two — plus a hard disc drive for recording programs. Two tuners mean you can record two different channels at the same time, or watch one channel while you record another. They're still quite expensive — are they worth the cost yet, or should you wait for prices to come down?

Espresso machines

Get into the habit of drinking great coffee at home and you'll never suffer from caffeine withdrawal symptoms again. CHOICE's expert tasters find the machines that make the best-tasting coffee, and our testers check out ease of use, speed and milk frothing.



Electronic photo frames

They're a novelty: a frame for your favourite photos that displays them one after another, in an automated slideshow. But they're not the easiest things to set up — if you give one to Grandma, make sure there's a grandson around to make it work for her.



Write or email — we want to hear from you.

Your experiences help our research and often let other readers know about scams and rip-offs. Positive outcomes you've had to a complaint you took to a manufacturer, retailer, importer or tradesperson interest us too. See opposite for how to contact us.

Beware of ear candling/coning

■ The Deafness Forum is a peak consumer body for the Deaf and hearing-impaired. We've recently seen ads for ear candling/coning, sent by concerned consumers.

An ear candle is a narrow, hollow cone that's been soaked in beeswax or paraffin and allowed to harden. The recipient of the ear candling lies on their side and someone else inserts the point of the cone inside the ear. The top of the cone is then set on fire and left to burn for a few minutes. The health claim is that the flame creates warmth and suction, which draws ear wax (cerumen) out of the ear canal.

The technique is adapted from the Hopi Indians' candles, where the practice was originally to rid the ears of evil spirits. The candles are often administered in health or beauty centres where staff have no training or expertise in caring for your ears at all.

This is promoted as an 'alternative' therapy, with claims that it's a natural way to clean your ears and that it may benefit excessive ear wax, sinus congestion or allergies, headaches and migraines, hearing impairment, ear irritation and infections, vertigo and imbalance, tinnitus, itchy ears and sore throat, glue ear and swimmer's ear, inner ear pressure, earache and other ailments.

There's no scientific proof or medical evidence to back up these claims. In fact, ear candling can be very dangerous. It poses a risk of fire and can cause serious burns and other injuries if hot wax drips into the ear or onto skin or hair. There have been reported cases of temporary hearing loss and even punctured eardrums.

The Deafness Forum strongly recommends that no one use ear candles/ear cones. They're dangerous and provide no medical benefit. If you're concerned about ear wax, speak to your GP.

Nicole Lawder,
Deafness Forum of Australia

CHOICE says *The Australian Society of Otolaryngology Head and Neck Surgeons agrees there's no scientific evidence to support ear candling and says it's an inappropriate, ineffective and possibly unsafe way of removing ear wax. In fact, a 2004 article in a British medical journal that summarised the evidence for or against was tellingly entitled Ear candles: a triumph of ignorance over science.*

Digital TV "trap for the unwary"



■ I wanted to let your readers know of a trap not mentioned in your July 2007 article on plasma and LCD televisions. We bought the recommended LG model and were pleased it included a digital receiver, as we wanted to get rid of our digital set-top box and consolidate our remote controls.

We agree with your comments that, given analogue TV signals will be discontinued in the next few years, all TVs should have an inbuilt digital receiver. However, there's a problem: there's no way to have the digital signal redirected to your video player or DVD recorder to record the digital programs. Internet forums regarding TV setup describe this issue as a "trap for the unwary", as most people don't realise that their TV won't have digital output for use by recorders.

Even if it had digital output, it would need to be on and tuned to the relevant channel to be able to record the digital signal — not very helpful for recording while you're out of the house or watching another channel.

The solution seems to be to buy a set-top box, so, unfortunately, ours is still in use. I'd recommend your readers ensure their DVD recorder has a digital receiver included (the latest LG model has it), rather than having it in the TV. It's much easier to route the signal through to the TV rather than the other way round.

Carolyn, NSW

CHOICE says *Yes, a DVD recorder or PVR (personal video recorder) with a digital tuner is currently the best solution to the problem. However, some manufacturers are now incorporating a PVR into their TVs, so you can record without the need for a separate box. Unfortunately, they only record to the inbuilt hard drive and we haven't seen one with a digital connection out to a DVD recorder; many only have a lower-quality composite analogue out.*

Saving energy on standby

■ Reading the letter on wasting energy on standby in the November 2007 issue prompted me to share my own experience. I recently bought a \$40 power meter to do an energy audit of my house.

About a year ago, I bought a 93 cm LCD TV (HD) for a very reasonable price. As a matter of curiosity, I used my power meter to measure the power used while running and also on standby. Running, it used about 185 W — no surprises there. What blew me away was that on standby it consumed 37 W! This is totally unnecessary since all it needs to do is wait for a remote control signal to turn it back on.

Obviously the designers expended no effort in minimising the standby power. To eliminate the wasted standby power, I went and bought a timer switch (a pack of two cost \$10), which now automatically turns the TV off at the wall between midnight and 6 pm the next day when it's not being used.

My timer switch runs 24/7 but consumes negligible power (<1 W) as measured by my power meter and saves me about \$50 per year in wasted power bills. It's also very quiet, inaudible from more than 20 cm. I'm now thinking of using this technique on other house appliances that aren't used most of the time, but consume excessive standby power.

Brian, SA

CHOICE says *Good point. Switching the TV on and off manually would save even the cost of a timer, but you'd need to remember to switch it off each night.*

Hearing aid rip-off

■ After visiting two audiologists for advice about a hearing aid (one who charged nothing for the consultation and one at a private hospital that charged \$230), I was appalled by the high cost of the hearing aids recommended. I started investigating prices overseas and found them to be substantially lower than in Australia. When I queried the difference, I was told that the local price included free servicing during the life of the appliance.

During a visit to Singapore I purchased one of the types recommended by the hospital, but for around \$3000 less than what they quoted. Even after forgoing the health fund rebate (which doesn't apply to hearing aids bought overseas), I'm still very substantially better off than if I'd bought it locally. If my hearing aid needs servicing, I can afford to pay for countless visits to a local audiologist to have it done out of the saving made on the purchase.

Kurt, NSW

CHOICE says *We've also heard of people buying their hearing aids at a much lower price in the UK or US and can only repeat the advice we gave in the July 2006 issue: to shop around, as prices can vary substantially from one provider to another. And if you're told the purchase price covers 'lifetime servicing', ask for this assurance in writing, with all conditions and exclusions spelt out.*

Thumbs up!

■ A recent experience prompted Bill Millar to give his Thumbs up to the Service Tasmania Agency in Hobart. He was answered promptly after the second ring of the phone; a "real operator" quickly put him through to the proper place and there his query was dealt with promptly and efficiently.

■ Helen Hampton gives her Thumbs up to Bird Munchies, which sent her three new sunflower bells upon hearing hers had crumbled apart. And it let her know in writing why it thought the fault had occurred, and that it would follow it up with its quality control staff.

■ When the benchtop attached to their five-year-old Weber kettle barbecue cracked, Paddy Hodgman hadn't expected the company would send a new benchtop under warranty, but it did within a week — "impressive".

Address your letters to Thumbs up! at the address below.

LETTER OF THE MONTH

Paying for tap water

■ Today at Hoyts Cinema, Erina, NSW, I asked for a cup of tap water with my son's popcorn — no problem. Later, when I realised we'd been charged \$10.95 (the same as for a popcorn and soft drink or bottled water combo), I queried the charge. Apparently, "stocktake issues" dictate they can only sell me a cup of tap water at the same price as a soft drink.

I know every business has to have a mark-up, but \$3.45 (the popcorn alone would have cost \$7.50) is many thousands of percent. I can't believe they can get away with charging so much for what pubs, restaurants and even McDonald's hand out free. I would even have been happy to pay a small charge for the cup, but don't believe in buying children soft drink or packaged water everywhere we go.

Lynne, NSW

CHOICE says *Hoyts Erina told us it'll happily offer a complimentary cup of tap water to anyone who requests it at any time. Pity its staff didn't heed that policy when Lynne visited. But the manager said he'd be happy to sort out Lynne's concerns. So next time you want to sip tap water with your popcorn, don't buy a drink combo but ask for it specifically, and remind the staff of this policy, if necessary.*

To thank you for taking the time to write to us, CHOICE awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner receives *How to Clean Practically Anything*, or any other book of her choice from the list on choice.com.au/books. We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract.

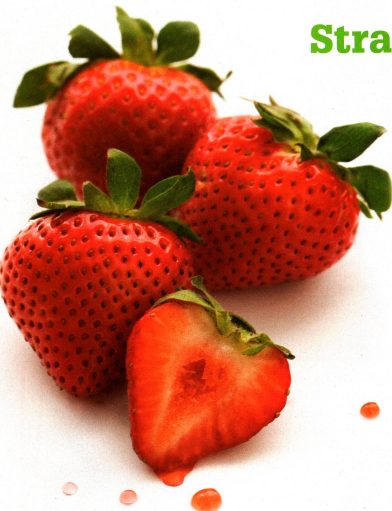


Email ausconsumer@choice.com.au or mail to: Letters, CHOICE, 57 Carrington Road, Marrickville 2204



PHOTO COURTESY OF LYNNE





Strawberries: poor pesticide practices

Our tests found pesticide residues in most conventionally grown strawberries — a few at levels that exceed the maximum acceptable limit.

An element of risk

If you're a farmer or you've used pesticides in your garden you'll know from the labels that they're dangerous chemicals that need using carefully. Our national food regulator, Food Standards Australia New Zealand (FSANZ), has set maximum residue limits (MRLs) for pesticides permitted in specific foods. MRLs are so small as to be measured in parts per million and they include a substantial safety margin. Despite this, some experts argue that there's still an element of risk even at these low levels, because we're likely to be exposed to a daily 'cocktail' of several different pesticides.

Evidence is growing that pesticides could be increasing our risk of some cancers, and possibly other problems such as Parkinson's disease and impaired cognitive development in children. (For more on this see *Pesticides in fruit and veg*, CHOICE, April 2006). And washing doesn't necessarily remove the pesticides from strawberries or other fruits. Some pesticides are systemic (which means they penetrate right through the fruit); others are formulated to resist being washed off by rain.

nutshell

► Almost all the conventionally grown strawberries in our test contained pesticide residues.
► While these chemicals are generally thought to be safe at the very low levels found, some experts are concerned that over the long term they're increasing our risk of cancer and other health problems.

We love our strawberries. They look beautiful and good ones taste delicious — but are poor practices in parts of the industry a hidden cause for concern?

Strawberries are unfortunately more likely to be contaminated with pesticides than other fresh fruit. Growers use pesticides to protect their strawberries from insect pests and fungal diseases. Without pesticides, strawberries would be more expensive because yields would be lower and there would be greater losses from them going bad before they get to the shops. (This is one reason why organic fruit costs more.) But pesticides can be applied too enthusiastically.

The last time independent test results were published in Australia (in 2003), strawberries stood out as the fruit with the highest levels of pesticide residues, though still within acceptable limits. They've been flagged in the US as of 'high concern' for pesticide contamination and when last tested in the UK, 67% of strawberries contained pesticide residues. In France a recent survey found pesticide residues above the legal limit in 20% of strawberries.

CHOICE's latest test results suggest we should be just as concerned about poor pesticide practices in Australia.

GOOD HEALTH!

The one thing health experts really agree on is that we should eat plenty of fruit and vegetables. Most fruit and vegetables contain phytochemicals, many of them antioxidants, that help to prevent heart disease, diabetes and some cancers. Strawberries are extra good because they're richer in antioxidants than many other fruit. They're also a good source of vitamin C and dietary fibre. And like most fruit, strawberries come without too many flab-forming kilojoules. They have only 100 kJ per serve of about 100 g — compare that with the 1600 kJ/100 g you'd get from the cream you might be tempted to dollop too liberally onto them.

Over the limit

CHOICE bought strawberries from various retail outlets and the Sydney Markets (see *How we tested*, right). Altogether we tested strawberries from 31 growers in all states except Tasmania and South Australia — 27 of them conventional growers and four certified organic growers, who shouldn't be using pesticides.

The test method could detect any of 150 different pesticides. We found the following in one or more samples: boscalid, captan, carbaryl, chlorpyrifos, dimethoate, endosulfan-beta, iprodione, pirimicarb and pyrimethanil.

Some results are disturbing:

- Three of the strawberry samples contained pesticide residues at levels that exceed the MRL, or pesticides that the regulations don't allow on strawberries.
- Another two samples were under the Australian limit for captan, but contained more of this fungicide than is permitted under more stringent EU regulations.
- Seventeen of the conventionally grown strawberries had residues of more than one pesticide; four came with a cocktail of no less than four different chemicals, though all below the MRL.
- One of the four organic samples contained the fungicide pyrimethanil. However, the level was less than 1% of the MRL, so it may have been from residual environmental contamination, or sprays blown across from an adjoining property.

MRLs are very conservative. It's highly unlikely that a few strawberries with pesticides above the MRL will do you any harm, but very little is known about the pesticide levels in fruit and vegetables generally (see *CHOICE verdict*, page 16), and long-term overexposure could be of concern. Children in particular are at greater risk than adults because of their smaller body size. If you want to minimise your family's exposure to pesticides, organic is the way to go. Independent testing has consistently found much lower levels of pesticide residues in organic than in conventionally grown produce.

Where are the best strawberries?

If you still fancy strawberries after all that, where will you find the sweetest and tastiest ones? All too often strawberries look wonderful in the shop but turn out to be bullet-hard and tasteless when you get them home, with a percentage of them often inedible because of rot or other blemishes. We also put our strawberries to the test for quality, checking them for blemishes, rot and ripeness (see *How we tested*, above).

- On average, strawberries from independent fruit shops had the fewest blemishes, with 70% blemish-free versus only around 55% from the big supermarkets.
- The ripest retail strawberries came from small

HOW WE TESTED



We bought strawberries from Coles and Woolworths supermarkets and independent Sydney suburban fruit shops (three of each). We also bought some from organic food specialists and from small organic food markets (again located in different Sydney suburbs). When an outlet had strawberries produced by more than one grower we bought five punnets of each. We always chose the best-looking strawberries on offer, like any other customer would. For comparison, and to increase the number of individual growers sampled, we also bought strawberries from the Sydney Markets at Flemington.

An expert examined each sample of strawberries and estimated the percentages of:

- Premium berries (with no obvious blemishes).
- Berries with no obvious rot.
- Completely ripe berries (100% red, with no white areas).

We then tested the strawberries from each grower (31 growers altogether) for pesticide residues. The test method would have detected any of 150 different pesticides; see *Over the limit*, left, for what we found.

suburban producer markets, with on average 80% completely ripe. This compared with only 56% from independent fruit shops (perhaps this accounts for them having the fewest blemishes) and around 67% for the two big supermarkets.

- Of the retail outlets, the fruit from organic specialists had the least rot: only 0.7% had significant rot compared with around 3% of the supermarket fruit. Whether we'd get the same results if we repeated the test we can't say, but it does give guidelines on what factors to consider when buying strawberries:

Strawberries taste best when they're fully ripe Unlike some fruit, such as bananas, strawberries don't develop their full flavour unless they're allowed to fully ripen on the vine. But often they're transported over long distances and wouldn't survive two or three days jolting in a truck >

< unless they were picked under-ripe. So under-ripe, flavourless fruit is the price we pay for having strawberries from interstate when there are no local ones available.

Shopping in Sydney we found strawberries from NSW, Queensland, Victoria and WA. On average the fruit from WA stood out as being the least ripe, whereas the strawberries from NSW growers were the ripest.

If you want flavour and sweetness, look for fully ripe fruit. There's a trade-off, though, as ripe fruit is more likely to have blemishes — but you can cut them off.

Strawberries taste best when they're fresh Strawberries start to lose flavour as soon as they're picked, so the longer it takes to get them from the farm to your plate, the poorer the flavour. And the flavour deteriorates faster than the strawberries themselves; they can still look fine a week after harvesting, but without much flavour left.

A punnet of strawberries usually has a sticker showing the grower's name and the district where the strawberries were grown. You can improve your chances of getting tasty strawberries by avoiding fruit that's travelled a long distance. Don't necessarily expect strawberries at your local produce market to have been locally grown. You might get lucky, but there's no guarantee. At the three markets where we bought strawberries, only one stallholder had local fruit that he'd grown himself; at another Sydney market we only found strawberries grown in WA.

Some varieties taste better than others It may not be obvious when you buy them, but strawberries come in different varieties (just as apples can be Golden Delicious, Fuji, Pink Lady, Granny Smith, etc) and some varieties have a better flavour than others.

Breeding programs have recently been producing some really tasty new varieties of strawberry, but as far as the consumer's concerned the effort's been wasted. None of the strawberries we bought had the variety stated on the label or displayed in the store. When we asked sales staff at each of the 15 outlets where we bought strawberries, only one could tell us the variety (the market stallholder who'd grown them himself).

Occasionally you might see the variety on the small label stuck to the punnet, and there's a space for marking the variety printed on the cardboard trays in which the punnets of strawberries are supplied to shops. But on most of the trays we saw at the Sydney Markets the grower hadn't bothered to mark the appropriate square.

Tasty varieties to look for are Rubygem from Queensland, Camarosa (a variety originally from California) and Millewa from Victoria. ■



CHOICE GUIDE TO GREAT STRAWBERRIES

Here's how to boost your chances of getting strawberries that taste as good as they look:

- Strawberries need a cool temperature at night to develop flavour and sweetness. This means they're at their best in spring and early summer.
- Choose the ripest fruit. Really ripe strawberries are sweetest and more likely to have a good flavour. Fortunately the punnets are usually transparent — look for strawberries that are red all over, with no white bits. They should have a bright red colour and the leafy stalk (the calyx) should look fresh and green; if they're a dull, dark red with shrivelled stalks they're over-ripe and best avoided.
- Look for fruit that's been grown locally (check the label on the punnet). Fruit that's travelled a long distance will have lost much of its flavour. If there's an organic or farmers' market in your area, try buying your fruit there.
- Flip the top off the 'clam shell' packaging and sniff — a good strawberry aroma is an indication that they'll be tasty when you get them home.
- Ask about the variety. Rubygem, Camarosa and Millewa are especially flavoursome ones.
- Store strawberries in the fridge and eat them as soon as possible. And for the best flavour, take them out of the fridge an hour or so before you eat them.

If you want to minimise your family's exposure to pesticides, organic is the way to go. Tests have repeatedly found lower levels of pesticide residues in organic produce.

CHOICE verdict

More independent testing is needed. Right now the only independent testing for pesticide residues in food is done by some state governments, and even then the number and types of products tested are limited and some states do no testing at all. The fresh fruit and vegetable industry has its own internal national testing program — called FreshTest — but the results aren't made public.

Our results highlight the need for truly independent, comprehensive and regular testing on a national basis, as is done in the UK. CHOICE welcomes the recent decision by FSANZ to include limited pesticide residues in its next Australian Total Diet Survey in 2008. This is a step in the right direction, but no substitute for regular and comprehensive testing, with appropriate follow-up.

Risky home loans

With first homes averaging \$430,000, interest rates on the way up and housing affordability at a record low, new types of loan seem an answer to the prayers of desperate home buyers — but are they?



nutshell

► Home loans designed to make buying property seem more affordable, but all have traps of some kind: more interest in the long term, higher fees, extra insurance costs, long-lasting low equity or even the risk of losing your home.

► Old wisdom but still true: borrowing to the hilt at current interest rates puts you in great danger if rates go up.

The new loans

40-year mortgage

Spreading your repayments over a longer period means lower minimum repayments, but you'll pay much more in interest.

No-deposit home loan

With these loans, the typical 20% deposit (about \$80,000 for a \$400,000 loan) is no longer required. Some banks lend you the full amount, and specialist lenders even offer you the money for legal fees and extras as well — but this comes at a high cost.

Shared equity mortgage

You can borrow up to 20% of the value of the property without paying interest, but when you sell it you have to pay back the original loan plus up to 40% of any increase in the value.

Guarantee

As an example, your parents can become guarantors and put up their home as security to enable you to get a larger loan or buy without a deposit. But if things go wrong, the bank can sell your parents' home as well.

These new loan products, described on the left, are much more risky than standard home loans. While they promise to make home buying more affordable, they all have traps. For example, with a no-deposit mortgage you can be in a situation where your loan is well above the value of your home for a long time, meaning you'll still owe money if you have to sell.

All these loans can get you into serious trouble unless you fully understand all the fine print and have taken the right measures to use the loan to your advantage.

In fact, the mortgage contracts that apply to most home loans can put home buyers at a serious disadvantage. With some contracts, even failing to pay your credit card bill can put you in default — your bank can ask you to repay your home loan immediately and, if you fail to do so, sell your house.

Borrowers can be very vulnerable under these unfair contracts. They can be full of complex clauses that the average person has little hope of understanding clearly, let alone negotiating for a fairer deal. Some give the lender very broad rights to declare a borrower in default of the contract. For more on home loan contracts, see *CHOICE wants fair home loan contracts*, page 18. >

Extending a mortgage to 40 years doesn't make it much more affordable and costs thousands of dollars more in the long term.

40-year mortgage

"When Chelsea Hughes entered the property market she didn't want to lose out on overseas travel or socialising just because she was buying a house," says promotional material from Savings & Loans Credit Union.

CHOICE crunched the numbers and found that extending a mortgage to 40 years doesn't make it much more affordable, and costs you many thousands of dollars more in the long term.

For example (see Table 1, below), on a \$250,000 loan with an interest rate of 8%, your repayments would be about \$100 per month cheaper: \$1738 per month over 40 years instead of \$1834 over 30 years. But it'd cost you: over the 40 years you'd pay nearly \$585,000 in interest alone, which is more than double the amount borrowed — and about \$174,000 in interest more than you'd pay over 30 years.

It's even worse on a higher mortgage. For example, if you borrowed \$400,000 you'd pay \$935,000 in interest over a 40-year term, about \$278,000 more than over a 30-year term. Your repayment reduction is just \$150 a month.

Taking out a 40-year mortgage because you can't afford the monthly repayments on a 30-year one doesn't just cost you thousands more in interest. It's also extremely risky and will backfire on you if interest rates go up. An interest rate increase of just 0.5% would eat up the difference between the repayments: a \$250,000 loan at an interest rate of 8.5% over 40 years would have a minimum monthly repayment of \$1833 — just \$1 less than the minimum repayment at 8% over 30 years.

Table 1. Comparison of repayments and interest over different mortgage terms

REPAYMENTS FOR \$250,000 MORTGAGE (8% PA INTEREST)	LOAN TERM (YEARS)				
	10	20	30	40	50
Minimum monthly repayment (\$)	3033	2091	1834	1738	1698
Total repayment (\$)	363,983	501,864	660,388	834,374	1,018,911
Total interest (included in total repayment, \$)	113,983	251,864	410,388	584,374	768,911

TOTAL REPAYMENTS ARE BASED ON MINIMUM MONTHLY REPAYMENT; LOAN FEES AREN'T TAKEN INTO ACCOUNT.

It's sensible to have an interest rate buffer of at least 2% when you buy. For example, in early 2002 banks' standard home loan interest rates were 6%; at the time of writing in December 2007 they're about 8.5%. If you'd borrowed \$250,000 in 2002 on a 30-year loan, you'd have started out with a minimum monthly repayment of \$1507, but would now be paying \$1931 per month. If you were stretched to the limit to meet repayments in 2002, how much harder would it be now?

CHOICE looked at three financial institutions offering 40-year mortgages:

- SAVINGS & LOANS CREDIT UNION.
- POLICE & NURSES/NURSES FIRST CREDIT SOCIETY.
- GE MONEY.

On the upside, all three allow extra repayments, so you could take out a 40-year mortgage and pay it back over a shorter term, such as 30 or even 15 years, without any penalty.

CHOICE WANTS FAIR HOME LOAN CONTRACTS

A number of home loan contracts CHOICE reviewed gave the lender very broad rights to declare a borrower in default of their contract. For example, one lender reserves the right to declare you in default if you lose your job or the value of your property decreases.

These contracts can be riddled with complex, legalistic and, often, outright unfair clauses. It's unrealistic to think individual consumers could negotiate these terms with loan providers. That's why CHOICE has called on the Federal Government to introduce new national laws to protect consumers and ensure contracts are fair.

Have you seen a dodgy contract term? Join us online in calling for new national fair contract laws — go to choice.com.au/campaigns, or mail your dodgy term to Fair Contracts, CHOICE, 57 Carrington Road, Marrickville 2204.



CHOICE verdict 40-year mortgage

It makes sense to repay your home loan as quickly as possible. Extending a mortgage to 40 years doesn't help much with affordability, as the monthly repayments aren't much lower. It can also get you into serious trouble if you budget to the limit on a 40-year mortgage; even a small rise in interest rates will hurt you badly. The only winner is the lender, as you're paying them much more in interest.

No-deposit home loan

"Whether you've started getting your deposit together, or you need to borrow the full purchase price, the St.George No Deposit Home Loan gives you options to make the dream of owning your own home a reality."

Several financial institutions are offering a home loan for the full or close to the full purchase price. However, this comes at a cost: usually mortgage insurance applies if you have less than a 20% deposit. No-deposit loans can also have a higher interest rate, especially compared to basic loans.

Mortgage insurance doesn't insure you, but the lender. It protects the lender if you default on the loan and your home is sold for less than your loan amount. The insurance will compensate the lender, but you're still not absolved from the debt — the insurer can chase you for it. It's worth taking the cost of mortgage insurance into account when shopping for a home loan, as it varies between lenders. See the variations we found in Table 2, below.

A small deposit versus no deposit can make a big difference. For example, on a \$400,000 home loan, a deposit of just \$20,000 (5%) could make your mortgage insurance around \$4000 cheaper.

Some lenders will even lend you *more* than your home is worth. For example, FIRST PERMANENT offers a 106% mortgage. That means you don't even need to save for legal fees and other costs. But does this make financial sense?

If you buy a home worth \$236,000, you can borrow \$250,000 on a 106% loan. At an interest rate of 8% on a 30-year mortgage, making minimum monthly repayments, it will take over five and a half years before you owe 100% of the original value of your home, and 15.5 years before your loan is down to 80% of that value.

This calculation doesn't take into account changes to house prices. If your home gains in value you'll reach these percentages much sooner, but if it loses in value you'll be deep in the red for a very long time unless you can make extra repayments. >

! HECS LOAN

A special type of no-deposit mortgage is the Graduate Home Loan. Offered by FIRST PERMANENT, it enables you to pay back your HECS-HELP debt when you take out a home loan. There's no maximum amount you can borrow above the value of the property, with an average loan of 110%, according to FIRST PERMANENT.

However, a 3.2% upfront fee on the full loan amount applies — for example, about \$8000 on a \$250,000 loan. You also have to pay a higher interest rate. And if you want to refinance within the first seven years you'll have to pay another two fees, which come to 3% combined.

All those fees, though, are just the beginning. The main problem is that you're paying a much higher interest charge on your HELP debt. For example, with normal HELP repayments, if you're on an income of \$80,000 with a \$20,000 HELP debt, you're required to use 8% of your gross income to repay your HELP debt. Your debt is indexed (goes up) at a rate equal to the CPI — 3.4% in 2007. You'd need about three years to repay the debt and would pay about \$1500 extra because of indexation.

If you repay the HELP debt as part of your mortgage, you initially get a 10% discount, so it reduces to \$18,000.

However, repaying this amount over 30 years at the current 8.9% interest rate would mean you'd pay about \$33,600 in interest.



If you borrow 106% at an interest rate of 8% over 30 years, it will take over five and a half years before you owe 100% of the original value of your home.

CHOICE verdict

No-deposit home loans

While these loans enable you to buy a house sooner, you need to take the cost of mortgage insurance into account. And with a loan for more than the value of the property, it's crucial to make extra repayments to get some equity as quickly as you can.

Saving as much as you can before buying will lower the amount of mortgage insurance, or remove it altogether if you can save a deposit of 20% or more of the property's value. It'll also give you a wider variety of lenders and loans to choose from — and helps you get used to the discipline needed when you have a mortgage.

Table 2. Mortgage insurance cost comparison

LOAN AMOUNT (\$)	MORTGAGE INSURANCE (\$) FOR % OF HOME VALUE BORROWED		
	85%	95%	100%
250,000	1500–2000	3000–4000	6200–6500
400,000	3400–4200	7100–9200	11,800–12,900

SOURCE: CBA, ST.GEORGE, GENWORTH, PMI; STAMP DUTY MAY BE ADDED, SUCH AS 9% IN NSW. (CORRECT ON NOVEMBER 15, 2007.)

If you'd repaid the \$20,000 loan after two years, following the massive jump in house prices, you'd have paid the equivalent of an interest rate of 45.8%.

Shared equity mortgage

A shared equity or shared appreciation mortgage (SAM) works differently from a normal home loan. You borrow, say, 20% of the value of the property as a SAM and instead of paying interest on it, you're charged a percentage of the capital gain when you sell. For the remaining percentage of the home's value (minus your deposit) you take out a normal home loan. This means your monthly repayments are lower than they would have been if you'd borrowed the whole amount under this loan.

What paying back a portion of the capital gain means is that as the value of the property increases, so also does the repayment amount. And, of course, it's very hard to predict just how much the capital gain is going to be. For example, in the last 20 years in Sydney, annual changes in the value of house prices ranged from a decrease of 3.9% (2004/05) to an increase of 46.1% (1988/89).

The RISMARK/ADELAIDE BANK Equity Finance Mortgage (EFM) was launched about a year ago and is available in capital cities (and some other metropolitan areas) in all states except the NT and Tasmania. With it you can borrow 10%, 15% or 20% of the value of the property under a shared equity mortgage. After 25 years, or when you sell the house, you have to pay back the initial amount you borrowed, plus 20%, 30% or 40% (double the percentage you borrowed) of the capital gain.

If you make a loss, the lender covers 10%, 15% or 20% of the capital loss, which is then deducted from the amount you have to repay.

With this loan, if you'd bought a house worth \$100,000 in June 1987 in Sydney and borrowed 20% (\$20,000), on average it would have been worth \$461,490 in June 2007, and if you'd sold it you'd have to pay back about \$184,600.

So the equivalent rate of interest you'd have been paying to RISMARK would have been about 10.6%. If you'd taken a loan over the same period, the average standard home loan rate would have been 9.5%. Obviously with a standard home loan, you'd have had to make

regular repayments over the whole period, whereas with RISMARK you only pay a lump sum at the end.

This doesn't sound too bad, but over a shorter period the picture could look very different. For example, if you'd repaid the same loan of \$20,000 after two years, following the massive jump in house prices in 1988/89, you'd have already owed \$49,137, meaning you'd have paid RISMARK the equivalent of an interest rate of 45.8%.

While this was a time with exceptionally high increases in house values, property values go in cycles and for a normal consumer it's sometimes hard to guess at which point in the cycle you currently are.

There are a number of other downsides to the RISMARK/ADELAIDE BANK product:

- At the time of writing, it could only be combined initially with a normal home loan from ADELAIDE BANK, which limits your choice of lender and products.
- Due to the way the property's value is calculated, you won't necessarily get your money's worth if you make any improvements, especially in the case of DIY renovations.
- If you're in default of the loan conditions and the house sells for less than you bought it, the lender doesn't share the capital loss.

A POSSIBLE ALTERNATIVE

A number of state government or state government-associated lenders offer shared equity mortgages too. They often have much more generous conditions, but some aren't available to everyone — they're based on income and the price of the property.



CHOICE verdict Shared equity mortgage

A shared equity/shared appreciation mortgage is a very complicated product and very different from other mortgages. It's crucial to understand the fine print: you need both legal and financial advice. While a normal mortgage diminishes over time and is likely to be easier to pay in later years when your income increases, the shared equity repayment amount grows with the value of the property.

Obviously meanwhile you're enjoying a better cashflow position as you don't have to make repayments on the shared equity mortgage. But you become hostage to developments in house values. Shortly after a period of high capital growth is a very bad time to sell, even if your personal circumstances, such as having a baby on the way, would make selling and upgrading the best option for you.

The bottom line is that the only way you come out on top is if you experience low or negative growth in the value of your home — but why would you want to invest in property if you expect that?

Bank wants to sell parents' house

Anna and Bill (not their real names) from Melbourne live on a Centrelink pension. They originally come from Europe and have limited English skills. As well as owning their home, they owned a property that they gave to their daughter and son-in-law, Mary and Paul (not their real names), as a gift.

Mary and Paul took out a \$380,000 loan with a bank. Anna and Bill say at that time they received a short visit from the bank manager at their home, asking them to sign some documents. They say they didn't understand these documents were a guarantee, but understood it was something to do with the gift of the land.

Two years later the bank sent them a letter saying the loan was in arrears and demanding they pay it. Some months later the bank issued legal proceedings to enforce the debt against not only the borrowers, Mary and Paul, but also the guarantors, Anna and Bill. The bank then obtained a judgment from the Victorian Supreme Court against one of the guarantors only, Anna, giving it the right to sell Anna and Bill's family home.

The Consumer Action Law Centre is currently negotiating with the bank on Anna's behalf.



Guarantee

"Purchase your home sooner with ANZ Family Guarantee."

Your lender may ask you for a guarantee from someone, such as your parents, if it thinks you might not be able to cover the loan repayments yourself. If you don't have a deposit, a guarantee may also mean you don't have to pay mortgage insurance and have a wider choice of loans.

Guarantors usually use their home as security, and traditionally they were liable for the full amount of the home loan. Now new-style versions like the ANZ Family Guarantee allow the guarantor to limit their liability to a specific portion of the home loan, such as 20%. However, even in this case, if something goes wrong and the borrower gets into default, the bank can sell their home and/or the guarantor's home.

The other problem with guarantees is that they can apply for the full period of the loan. During that time the situation of the guarantor — typically parents — can change. While at the start of the loan they may still be in the workforce and have an income they could use to support the borrower in case of a problem (such as unemployment), later on they may be pensioners and their home their only asset.

As a guarantor you have rights; for example, you can ask to receive statements for the loan. Make sure you keep track of them, so you can act in case of problems.

If you're interested in a guarantee or being a guarantor, ask the lender:

- What would happen in the worst-case scenario — could the guarantor's house be sold, and under what circumstances?
- Are there any extra costs, such as for a valuation of the guarantor's home?
- Can the guarantor be released from the guarantee and under what circumstances — for example, once the borrower has enough equity in the property?
- What's the cost of releasing the guarantor? Typically the borrower would need to refinance, and while the lender might waive the application fee, other costs such as mortgage stamp duty might apply.

Another example of a home loan with guarantor is CBA Family Equity. It has five options, three of which are variations of traditional guarantees. The other two options give the guarantor more security:

- Second mortgage — the guarantor takes out a second mortgage on the borrower's property, and is responsible for the repayments on it. If either fails to make loan repayments, the bank will sell the borrower's property only.
- Gift of loan proceeds — instead of giving a guarantee, a family member, such as your parents, takes out a separate loan on their property and gives the loan proceeds to you. The family member is responsible for the loan repayments on their loan only.

Beware If you're on Centrelink support payments, you'll need to check the gifting rules. ■

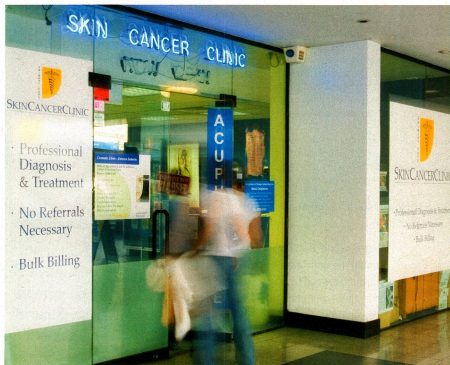
Guarantors usually use their home as security. If something goes wrong, the bank can sell the borrower's home and/or the guarantor's home.

CHOICE verdict Guarantee

A guarantee is a very risky option for the guarantor. It's important to get legal and financial advice and make a long-term plan — what will happen if, 10 years down the track, your child divorces their partner, for example?

Consider the option of borrowing to lend to your children instead, or simply giving them money.

If you decide to give a guarantee check the Consumer Credit Code, which offers guarantors protection, at www.creditcode.gov.au. The code specifies a number of conditions that must be met before a guarantee for a loan could be enforced.



Just skin deep?

Skin cancer clinics are opening everywhere. The industry is accused of putting profit ahead of patient welfare. So are you putting yourself at risk if you use one?

nutshell

- Research has shown that GPs and skin cancer clinic doctors diagnose skin cancer with similar accuracy.
- If you go to a skin clinic, make sure you're informed about the doctor, the costs and any tests or procedures recommended. If you're in any doubt about a diagnosis or recommended procedure, get a second opinion.

Have you spent the summer sun worshipping? Or do you strictly slip, slop and slap? Either way, there's nothing like a long hot summer to get you thinking about your skin — or at least remembering that you ought to. While it's recommended you check your own skin regularly, sometimes it's difficult to know if spots are new or if the moles on your back have changed shape, so getting your skin checked by a professional makes sense.

Traditionally your family GP would have been your first port of call, but more recently there's been a rapid proliferation of clinics dealing exclusively with skin cancer, providing people with an alternative.

Given the prevalence of skin cancer and the increasing profile of these clinics in Australia, it's not surprising that there's an enormous demand for information about this industry — in the last financial year the Cancer Council NSW received 3974 calls about skin cancer to its helpline, 2251 (57%) of which were specifically about skin cancer clinics. This article aims to fill in some gaps.

What are skin cancer clinics?

Skin cancer clinics provide a convenient one-stop shop for skin checks and a variety of procedures, including biopsies and skin cancer removals. Many offer the latest digital technology to assist in examining skin spots. Some even have the facilities to store images of your spots for future comparison. While many services, including the initial consultation, are usually bulk-billed, you'll pay for some procedures, such as biopsy or spot removal.

There are no regulations about who can set up these clinics — they range from small, independent operations to those that are part of large corporate chains.

Contrary to popular belief, doctors working in skin cancer clinics aren't usually specialists — they're primarily GPs. And there are no particular requirements for training or certification of the doctors who work there.

Skin clinics and the doctors working in them have received some bad press in the last few years, with concerns raised about the type and quality of work performed within the clinics, and suggestions that they're carrying out procedures on patients that aren't medically necessary, simply to maximise income. We sent a shadow shopper to skin cancer clinics to see what experiences she'd have.

CHOICE's shadow shop

Our shadow shopper, Tina, aged 60, has fair skin, light auburn hair and blue eyes, so is a prime candidate for skin cancer. Prior to the visits her skin was independently

1 million

The number of patient encounters with GPs each year relating to skin cancer. Skin cancers are the most common cancer managed by GPs.

assessed by three specialists and, fortunately for her, given the all-clear. Tiina has a number of benign (non-cancerous) spots on her skin (age spots and sun-induced freckles, for example) and several skin tags (harmless skin growths) but nothing of any cause for concern, according to our experts.

Tiina visited 27 skin cancer clinics in NSW and Queensland. Following each visit she completed a survey giving details of the questions asked, method of skin assessment, equipment used, and any recommendations for procedures, tests or skin care advice given. The specialists then assessed the completed surveys.

The good news

According to our experts, most of the consultations were undertaken appropriately. The doctors didn't misrepresent themselves as being skin specialists — although when asked, over half said they had years of experience or a 'special interest' in skin cancer.

In most cases the consultation process was conducted appropriately and thoroughly, with the doctors asking Tiina for her history — has she ever had sunburn, is there a family or personal history of skin cancer, has she noticed any changes to her skin, for example. Tiina was given a full body examination (removing all clothing except her underwear) in all but one of the 27 skin cancer clinics. >

300,000

year with melanoma or non-melanoma skin cancer. Skin cancer is the most costly of all cancers to treat in Australia.

The number of Australians diagnosed each

Spot the difference

Drew has numerous spots on his skin. Rather than trying to keep track of them himself he prefers to get them checked by professionals, and the last couple of checks have been done at skin cancer clinics rather than by his family GP. His experiences have been mixed.

He had to wait three weeks for an appointment on his first visit, in 2006, because the clinic was fully booked. The doctor who saw him seemed extremely busy. He gave Drew a full-body skin examination then left the room to see another patient. "When he returned he started freezing spots off my body including, to my surprise, one on my face", said Drew. "I hadn't been warned that this was about to happen, and I wasn't told what the spots were or why they were treated." The consultation was bulk-billed and the treatment left no scarring, but the whole experience left Drew feeling he'd been part of a production line.

Last year Drew had another skin check, but because of his previous experience he made an appointment at a new clinic close to his home. According to Drew, the consultation couldn't have been more different. "The doctor took a history, asking me about previous sunburns and family history of skin cancer, amongst other things. After a full skin examination, he froze some spots off my skin, but discussed the reason and procedure with me first." A follow-up appointment was made to check that everything was OK, and also to review a particular spot on Drew's back for change.



PHOTO COURTESY OF DREW

TO GP OR NOT TO GP: THAT IS THE QUESTION

So are you better off seeing your GP for a skin check? Australian researchers in 2006 found doctors in skin cancer clinics were cutting out almost 29 moles for every melanoma they picked up. They were also performing expensive and over-complicated skin flap repairs — where nearby skin is moved to cover the area where a lesion was cut out — at up to three times the rate that dermatologists and specialist surgeons were.

Research from Queensland published last year, however, found that skin clinic doctors have a high success rate at identifying a wide range of benign skin markings, and moderate to high success identifying cancer. Another Australian study published last year found that GPs and skin cancer clinic doctors diagnose skin cancer with similar accuracy.

The same study found that skin clinic doctors are more likely than regular GPs to have had additional training in skin cancer, conduct whole-body skin examinations and use specialised equipment such as computer imaging to assist their diagnosis. Any equipment is simply a tool that assists in making a diagnosis, however — the quality of the diagnosis still depends on the experience and skills of the doctor.

As part of a move to raise academic standards and boost credibility, the Skin Cancer Society of Australia, formed in 2005, now offers a Certificate of Skin Cancer Medicine that requires doctors to demonstrate their knowledge and skills in the area. From this month, doctors who obtain the certificate will be able to apply for skin cancer practice accreditation, which requires them also to have good practice systems in place. It may be a year or so, though, before the first doctors are accredited and their details made publicly available.

Contrary to popular belief, doctors working in skin cancer clinics aren't usually specialists — they're mainly GPs.

The bad news

Doctors at three clinics recommended a biopsy — the removal of a sample of tissue for diagnosis — of a spot on Tiina's cheek, which our experts thought was unnecessary. At one clinic, the doctor suggested the "suspicious" skin lesion "could be solar keratosis, BCC [basal cell carcinoma], intraepidermal carcinoma or HMF [Hutchinson melanotic freckle]". These diagnoses range from relatively harmless to quite serious. In his review of this visit, one expert's response was: "This doctor has given a rather wide-ranging diagnosis despite his use of a dermatoscope ... After making this statement he didn't suggest a second opinion from a specialist and was willing to wait a year to review the patient, despite his uncertainty."

In two cases Tiina was told the biopsy wouldn't result in scarring, which our experts disputed. "Advice about biopsy leaving no scarring is quite incorrect," said one.

One clinic recommended the removal of a skin tag on Tiina's neck without explaining why. After requesting a written report to take away with her so she could consider the procedure, Tiina was ushered out of the consulting room. Our experts all disagreed with this outcome. As one summed it up, "It is preferable to discuss the diagnosis and ask if the patient wants any benign lesions (such as a skin tag) removed. It would be important to discuss the pros and cons of different techniques of doing so, including cost, time to heal, side effects of treated versus untreated condition."

The majority of clinic doctors that gave advice on how often Tiina should have her skin checked said she should return to the clinic yearly, as a matter of course. Given that Tiina's skin was fine, our specialists thought this unnecessary, and that instead she should have been advised to return only if she noticed any changes in her skin.

Most surprisingly, only one of the 27 clinics visited gave Tiina advice on skin/sun protection (and this was merely to wear a hat). As one of our experts said, "Given [Tiina's] pale skin, advice should have been given on sun protection measures such as wearing a hat, long-sleeved clothing and sunscreen products." ■

CHOOSING AND USING SKIN CANCER CLINICS

If you're going to visit a skin clinic, make sure you're informed about it. The following tips from the Cancer Council NSW show you how.

The practitioner

- Ask about the qualifications, skills and experience of the person who will examine you. The Skin Cancer Society of Australia's website (www.skincancersociety.com.au) lists the skin cancer education and training opportunities available to Australian doctors — does your practitioner have certificates for any of these?
- Ask whether the person is a member or fellow of any professional association relevant to skin cancer (such as the Australasian College of Dermatologists).

The costs

- Ask what costs are involved, not just for the initial consultation but for any follow-up treatment you may require. Some clinics promote bulk-billing, but sometimes just for the initial consultation. Certain procedures — a biopsy or spot removal, for example — often involve extra charges.
- Many clinics use technology that involves computer-assisted scanning and store images of your spots for future comparison. Ask if there's a fee for storing the images and for follow-up appointments.

Information and follow-up

Ask the clinic for:

- Results of any tests you've had there.
- Information about skin cancer, prevention and sun protection.
- Information about checking your own skin.
- A reminder letter about future check-ups.
- A record of your diagnosis and treatment to be sent to your GP.

CHOICE verdict

When you visit a skin cancer clinic it's more than likely you'll receive competent diagnosis and treatment. But as our shadow shop shows, the outcome of a consultation and information given can vary. Use our checklist, above, as a guide to choosing a clinic and what questions to ask. And if you're not sure of a procedure or diagnosis, get a second opinion.

CHOICE would like the industry to push ahead with self-regulation, to ensure that doctors who work specifically in the area of skin cancer provide the highest standards of clinical care. Meaningful accreditation of skin cancer clinic doctors (not just the clinics) that reflects minimum standards of education, skills, training and a code of conduct is vital.



The Skype's the limit

Cut your phone bill by talking over the internet. VoIP calls are now a viable alternative to a fixed landline.

nutshell

► VoIP calls can be much cheaper than using a landline, while voice quality is about the same or only a bit worse.

► Internet service providers are now offering VoIP as part of an overall internet package that lets you call landline and mobile numbers.

Despite advances in technology, not much has changed with the way people talk to each other over distance since Alexander Graham Bell used the first telephone to chat to Mr Watson in 1876. The explosion of mobile phone use has made the process more portable, but the main form of instant communication remains the direct voice-to-voice call.

Thanks to increases in internet speeds, Voice over Internet Protocol, known as VoIP, is now an alternative to the fixed landline or POTS (see *Jargon buster*, right) — with the advantage of cheaper phone calls.

What's VoIP?

VoIP converts the voice signal from your telephone or microphone into a digital signal that travels over the internet and then converts back to voice at the receiver's end. If you have ADSL, cable or wireless broadband internet, VoIP can most likely be incorporated into your internet access plan, allowing you to make and receive calls through your internet connection instead of your normal landline connection. This form of VoIP is almost the same as having a normal landline and you even get a normal eight-digit number with an area code.

Until recently, VoIP usually meant wearing a headset hooked up to a computer connected to the internet, and talking to another person also sitting by a computer — hardly the most natural way to make a phone call! >

Jargonbuster



Plain Old Telephone System (POTS) describes the traditional method of telephony, with voice travelling along copper wire without any digital conversion.

Analogue telephone adapter (ATA) is a device that allows a standard home phone to make VoIP calls.

Wi-Fi is a wireless networking technology that allows devices to connect to a network and to the internet without cable connections.

Did you know?

You're most likely using VoIP every day without knowing it. The major telcos have been using VoIP technology for several years, with their network system dealing with voice calls as just another stream of data. Unlike the variable quality of a VoIP connection that you may experience as part of an internet plan, phone quality is kept consistently high due to the telcos' control over the network traffic.

Often the only time your call will travel the traditional POTS route is from the handset to the local telephone exchange and again from the exchange closest to the receiver's phone.

Also, if you've bought one of the freely available telephone cards that offer great deals on overseas calls, you've been using VoIP. These card companies buy cheap data from ISPs and use it to transfer your voice calls at a much cheaper rate than would be possible over a normal POTS.

Skype-to-Skype calls are free, while calls to other phones cost money — but the savings are still significant compared to a landline.

Now the options include dual-mode cordless phones that can be used as either a VoIP phone or with a normal landline, free VoIP calling on your mobile phone with some plans and even the ability to use a wireless (Wi-Fi) telephone device to make free VoIP calls when you're in a Wi-Fi area or hotspot. Using an analogue telephone adapter (ATA) you can even make VoIP calls using your current landline phone.

Disadvantages compared to a landline include no support for a fax machine, variable voice quality and no widespread support for 000 and other emergency calls. In the event of a power outage, you'll lose the ability to make calls because you'll lose your internet connection — just as you can't use a cordless phone in a power cut.

Many companies and internet service providers (ISPs) offer VoIP services to residential customers — you can check them out at VoIP Choice (www.voipchoice.com.au) or Market Clarity (www.marketclarity.com.au/voip/), where there's information on the various plans for local, international and mobile calls. Whirlpool (www.whirlpool.net.au) is also a good source of information on the latest internet and VoIP developments.

For the best, most consistent voice quality, you'll need a fast internet connection: 512 kbps is generally considered the minimum. You could pay around \$50 (for cable or wireless) or \$60 (for ADSL or one of its improved versions — ADSL2 or ADSL2+) per month for a connection that's fast enough to make these internet phone calls.

If you're on a restricted internet usage plan you'll have to take into account the limits on downloads and sometimes uploads. However, an 8 GB internet quota will give you over eight hours of talk time a day, which should be more than enough.

What's Skype?

If you find the idea of VoIP attractive but don't want to be tied down to an internet plan, Skype (www.skype.com) allows you to talk to other Skype users free and other mobile and landline phones for a small fee. It's currently the most popular VoIP service available.

Skype is free to download and there's no setup or subscription fee when communicating with other Skype users. Once you register for the service, you then need to create a Skype user name, such as yourname.anything, which will be used as your point of contact instead of a landline number.

Skype software lets you add people to your personal contact list and you can see when they're online, offline or busy. You can organise your contacts in groups such as friends, family or work.

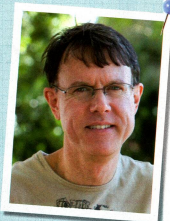
Happy with VoIP

Scott from Peshurst, NSW, has had VoIP as part of his internet plan with iNet for the past 18 months, and uses VoIP for most of his local and overseas phone calls. While he acknowledges some variations in quality when using VoIP compared to his landline, Scott is more than happy with the service.

"While not dramatic, the call quality on the VoIP phone is definitely lower than on my landline, but it's not enough for me to stop using it," he says.

The service provider supplied a modem that Scott can simply plug a normal cordless phone into and make calls in the same way as with a normal fixed-line phone. Although he pays a phone line rental of \$34.95 every month, he rarely uses it unless he needs to make an emergency call or to take incoming calls — it's the number he gives out to friends and family to take incoming calls. "I also have a fax machine that needs to be connected to my landline, as my VoIP service doesn't support faxing."

Local calls cost Scott 10 cents on the VoIP connection compared to 17 cents for calls made on the landline handset.



GENE ROSS

While most Skype calls are made from a computer using Skype software and a headset or USB phone connected to the computer, a dual-mode phone with Skype provides support for a normal landline connection plus VoIP on a single handset (there's a test of dual-mode cordless phones on page 58). The major advantage with a dual-mode phone is that the handset isn't physically connected to the computer and you have a screen on the phone that shows VoIP contacts and availability.

While Skype-to-Skype calls are free, additional Skype features cost money. For example, with Skypelln and SkypeOut you can communicate with people on a 'real' eight-digit number with an area code. But the savings can still be significant if you use it often instead of a landline. Calls to landlines cost around three cents a minute.

Sorry, wrong number!

VoIP numbers link to an internet address rather than a phone number, which means you can use your VoIP

service and handset no matter where you are, as long as internet access is available.

Unfortunately, this is an issue with emergency services, as there's no sure way to determine where a call has originated. There have been examples of VoIP calls made where emergency services were sent to a completely different city, because of the number used.

The Australian Communications and Media Authority has raised this concern and has proposed amendments to the telecommunications regulations so that VoIP providers must provide support for 000 calls, as well as providing information to emergency service authorities so that an incoming call will be flagged as a VoIP number and the caller asked for their location.

Unfortunately, the telecommunications determination only has power over local ISP services, not VoIP providers such as Skype. The timeframe for implementation is set for sometime over the next 18 months.

Getting naked ... ADSL style

In what could signal a major blow to the telcos' billion-dollar cash cow of landline rentals, some ISPs are now able to offer an ADSL internet package without the requirement to pay for telephone line rental.

Cable and wireless broadband users have been able to disconnect their landline for some time. However, ADSL users make up the biggest share of the broadband internet market. Many of these people could be paying for line rental they no longer need. Called Naked DSL, the new package could save you around \$30 per month if you use ADSL to connect to the internet, are happy to use VoIP for phone calls and don't want to keep your home telephone connection.

At the moment, only iiNet (www.iinet.com.au) offers the service, but several ISPs, including Engin, have indicated that they have Naked DSL plans in the pipeline.

More and more people are abandoning the fixed landline as the primary source of communication, moving to either their mobile phone or using VoIP to

call people. But you do need to consider a few things before ditching your landline:

- Make sure everyone in the household knows they have to identify their location if they make a 000 call.
- Can your new handset work without mains power? Cordless phones can't, and your mobile will only last as long as its current charge.
- Check that you'll get a regular phone number that's charged at normal landline rates when people call you.
- If you have a fax machine, it most likely won't work on the ADSL connection.

For more on operating without a landline connection at home, see CHOICE, October 2007. ■

SKYPE ON THE RUN

Mobile phone company 3 is getting in on the VoIP act with the release of a Skype mobile phone, available now for around \$179 or free with any phone plan. Working just like a normal 3G mobile phone, the Skypephone also allows users to make free Skype calls by selecting the dedicated Skype button on the mobile and choosing one of the available contacts.

The free Skype time is only available while you have an active SIM in the phone, which means paying for a monthly plan like a normal mobile phone, or a prepaid plan where you need to top up the phones credits every couple of months.

At the moment 3 doesn't allow Skypeln or SkypeOut, but hasn't ruled them out at a later date.



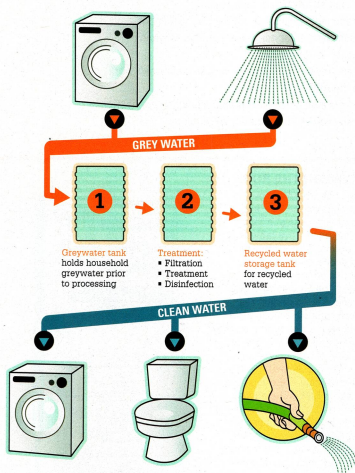
IMAGE COURTESY OF 3

CHOICE verdict

The VoIP options available have never been better, with a range of situations — dual-mode cordless phones, VoIP over mobile, free VoIP services such as Skype — catering for different lifestyles. If you have a broadband internet connection and want cheaper local and national calls, your current ISP may be able to incorporate VoIP into your existing internet plan. If you like the idea of free calls and you can get friends and relatives to join a service such as Skype, you can look forward to low or no phone bills. And check out our test results for dual-mode cordless phones on page 58.

Going grey has costs and benefits

We take you through greywater recycling options, from simple diversion to 'Class A' treatment systems.



nutshell

► Some systems cost less than \$1000, some cost over \$10,000 and water quality varies accordingly.

► For many people, a rainwater tank to water the garden is a cheaper and more practical solution than using greywater.

With water restrictions operating in many parts of Australia, people are looking at ways to save water or save their garden — or both. Rainwater tanks are one option — if you're getting any rainfall. Recycling greywater is another logical option: after all, you don't need drinking-quality water to water the garden or flush the toilet.

What exactly is **greywater**? It's the waste water from showers, baths, spas, handbasins, laundry tubs and washing machines. Water from dishwashers and kitchen sinks is often referred to as **dark greywater**, because it has a higher load of chemicals, fats and other organic matter. Water from toilets is called **black water**.

It's estimated that just over half of a household's total water could be recycled as greywater, saving hundreds of litres of water per day.

Greywater 'systems' range from a simple hose from the washing machine to the garden, to treatment systems that treat greywater for use in your washing machine or toilet, as well as the garden.

But what sort of system should you get? If you just want to water the garden, can you make do with a diverter? If you don't have much of a garden, is it worth getting one at all? If you're fairly conservative with your water use anyway, will you produce enough to warrant the expense of a recycling system? What are the different levels of treatment, and what level of treatment is required for different uses? And why is there such a variation in the cost?

Recycling systems: your options

There are two basic types of system: diversion devices and treatment systems.

Greywater diversion devices

Using this system, greywater is diverted from its source to the garden.

The diversion device could be as simple as a flexible hose that you attach to your washing machine outlet, sending the rinse water into the garden (instead of the drain) whenever it needs watering. But avoid using wash water: a CHOICE test (April 2007) showed it would be bad for most soils to put water containing so much detergent onto your garden. For more on this, see *Greywater gardening*, page 30.

Moving up a level, simple diverter valves can be plumbed into appropriate outlet pipes, and allow you to manually switch between diverting water through pipes onto the garden, or into the sewer. These cost from around \$30.

Other diversion systems include shower to toilet diversion — an option if you have no garden. These are called closed-loop systems, though they're not approved in some states.

More sophisticated diversion systems include a surge tank, filters and a pump.

- A surge tank takes the brunt of greywater outflow and ensures the garden won't be suddenly inundated with hot water or, worse, allow greywater backflow into the house. You need to remove sludge from the

tank every six months or so. It should also have an overflow device sending excess water into the sewer.

- Filters remove hair and other large particles from the water so they don't clog up your irrigation pipes (which can be an issue with diversion-only installations). They require routine maintenance to clear the filters, and need replacing every 6–12 months.
- A pump may be necessary to get water to all parts of your garden, especially if gravity's not on your side. You'll need a power source for it, which may mean getting an outdoor power point installed.

Costs for these more complex greywater diverters range from several hundred to several thousand dollars, depending on what you need in the way of pumps and surge tanks, irrigation equipment and the suitability of your existing plumbing. You'll also need the services of a licensed plumber, and will most likely need to alert authorities that you have such a system in place.

Untreated greywater should only be used for subsurface garden irrigation — that is, through a network of pipes buried at least 100 mm below the ground — to reduce the risk of human or animal contact. Pipes carrying untreated greywater must display relevant warning labels. And you can't store untreated greywater, because the bacteria and other pathogens could multiply to dangerous levels. Use it immediately (or within 24 hours), and if it's raining, divert it to the sewer.

Greywater treatment systems

These systems collect and treat (and some disinfect) the water to various levels of purity and hygiene. Generally, the higher the treatment level, the higher the cost.

Several stages are involved in the treatment of water, starting with the filtration of solids (lint and hair). Pathogens and unwanted chemicals (such as salts and nutrients) can be removed from the filtered water in several ways, including the use of micro-organisms and chemical treatment. Disinfection by chlorination or UV light is the last stage of the process, though not all systems do this.

We found basic treatment systems for around \$4000. The water produced is cleaner than greywater that's only been filtered, and some of the chemical and nutrient load has been reduced — so it's kinder on your plants. However, for health reasons it should still be used only for subsurface irrigation systems for ornamentals and fruit trees, say.

Systems that treat greywater to 'Class A' level (which is considered safe for watering food plants, including vegetables eaten raw, but not for drinking or preparing food) cost from around \$10,000 up to well over \$20,000, including installation. Costs tend to escalate if a lot of

1000 L per day to less than 500 L

That's how much the Helm family's drinking-quality water usage has dropped since they installed a greywater treatment system in their home in Frankston, Victoria, in May 2007. Their main consideration at the time was their garden, and while they had a rainwater tank, rainfall was unreliable. They considered using untreated greywater, but the fact that it can't be stored meant it wasn't a feasible option.

After doing research on the internet, Gary decided on a Nubian Oasis Greywater System with a 2500 L storage tank. It takes water from the shower, bath, handbasin and washing machine and processes it to Class A level (safe for watering food plants). This water is then used on the garden and in the toilet and washing machine, with the option to switch to mains water inside the house when the garden needs more water.

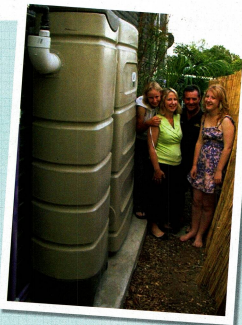
The system itself cost just over \$8000, plus \$1500 for a tank and \$1000 for a pump. Normally there'd have been about \$4000–\$5000 worth of plumbing parts and labour required, but being a plumber, Gary was able to do the work himself. They received a \$500 rebate for the system.

In terms of maintenance, the system needs two professional services a year, and the UV lamp (used for disinfecting the treated water) is replaced annually. Electricity costs are low, using about the same energy as a light bulb for a couple of hours a day.

extra plumbing is required (if your bathroom and laundry pipes are spread all around the house, for example) or if pipes are in a concrete slab. The amount and location of water storage can also affect costs. Installing a system when building a new house (or doing major renovations) tends to be cheaper than retrofitting one.

The cost of mains water in Australian cities is so low that you're unlikely to ever recoup the cost of a greywater treatment system. On the other hand, if you consider that a garden makes up about 10% of the value of your home, you might think the cost of a treatment system to keep your garden (and home value) growing during water restrictions is worthwhile.

Treated water can be used in washing machines and toilets, as well as on the garden. If you don't have much garden to water, or if you don't need to water it in all seasons, this sort of system may be a more useful option, as you can use the water elsewhere. >



55% of households report using greywater. 24% use it as the main source of water in their garden. (ABS, 2007)

Which type of greywater recycling is best for me?

For many people, installing a rainwater tank and pump is cheaper and more practical than trying to use greywater in your garden. Greywater is more of a workable option if you want to maintain a large, thirsty garden. But if you produce a lot of greywater, thanks to a large household, regular use of a top-loading washing machine and/or a passion for long showers, it could be worth investing in some sort of greywater recycling. The kind that best suits will depend on your situation:

Drought-affected supply

If you live in a drought-affected part of the country and/or have to rely on rainwater for your household water supply, a greywater treatment system could help a lot — especially when water is worth any price. If it's plumbed into your toilet and washing machine, you'll save precious drinking water. It will also reduce the load on septic tanks or drought-stressed waterways. (You might also consider a waste water treatment system that handles black as well as greywater, though this is beyond the scope of this article.)

Small or no garden



If you produce a lot of greywater but don't have much garden, you could get a treatment system that allows the water to be used in your toilet and/or washing machine. See *Greywater gardening*, below, to get an indication of garden size versus greywater required.

Vegetable gardening

If you want the water for growing herbs and vegetables you'll need to get a high level of water treatment to use it on the garden — and you can also use it indoors. Untreated greywater should definitely not be used on food plants that will be eaten raw.



Big garden (fruit or ornamentals)



The cheapest and simplest solution is to get a diverter and send that water to the lawn or garden through subsurface irrigation pipes. However, a higher level of treatment will be safer and give you more options (such as also using it indoors).

The whole green shebang

Installing a greywater treatment system will reduce how much water you use (especially if teamed up with a decent-sized rainwater tank), reduce the amount of water going into the sewerage system, and avoid some of the cost to the community of infrastructure for providing water and dealing with waste. While it won't necessarily save you much money, for many it's simply buying peace of mind. And let's face it: there's kudos in green status symbols!

Check before you buy

Authorities are often lukewarm (if not downright discouraging) about the use of untreated greywater on gardens, especially in areas of high population density where potential contamination of neighbouring properties, soils and groundwater is a concern, not to mention contamination of food plants. There are certainly situations where the risks outweigh the benefits.

Check first with your local council for what's required, and it may also be able to tell you whether you're eligible for any rebates. As well, you may need approval from your council and/or water authority. And before you order any greywater diverter or treatment system, you need to check that it's accredited by your state health or environment department.

It's unfortunate, and perhaps ironic, that while anyone can pipe their contaminant-loaded washing machine and bath and shower water onto the garden, systems that provide a better level of treatment — and therefore safer water — involve you in more bureaucratic dealings.

Greywater gardening

Various estimates show that the average Australian produces almost 100 L of greywater per day. You may be able to come up with a more accurate figure by checking the water meter before and after showers, and before and after doing the laundry. Monitor these figures over a week.

By far the easiest way to use your greywater is on the garden. However, it very much depends on the size of your garden: if you produce more greywater than your garden can use, you'll need to consider other uses of greywater — or only use your 'cleaner' greywater.

When you're calculating how much greywater you can put on your garden, reckon on about 20 L per square metre per watering event. The frequency of watering events required depends on the local climate, rainfall and the season, while the amount of water required per square metre depends on soil type (20 L is for loam soils).

Using these average figures, though, the average person produces enough greywater to water 35 square metres of lawn or garden once a week.

Try the calculator on the right to see how much lawn or garden you need to account for all your greywater.

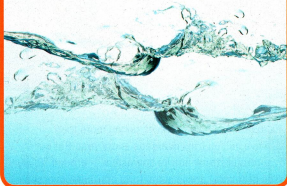
If your garden is as big as or bigger than the calculated figure, you could get away with a greywater diverter system. However, there are several caveats:

- You shouldn't store water for more than 24 hours, so you may have to water different parts of your garden each day, and divert greywater to the sewer when it's raining.
- Keep an eye on the health of your plants: greywater tends to be high in chemicals that alter the structure of the soil, and it also tends to be overused — sick-looking plants could be suffering from overwatering, rather than the greywater per se.
- Give your plants a break by using rainwater (if you have a rainwater tank) or tap water every six weeks.
- Increase the organic content of your soil (with compost, say) to improve its structure and help it survive the chemical onslaught.
- Your greywater shouldn't escape from your property into a neighbouring one, into stormwater systems or aquifers used for drinking water — it's illegal.
- Water from front-loading washing machines tends to have a high concentration of detergent, so unless you're willing to use less than the recommended amount and compromise on the 'cleanliness' of your clothes, we wouldn't recommend you use the wash water on your garden. The amount of rinse water may not be enough to make it worthwhile (about 30–50 L per cycle — enough to water about two square metres of garden).
- Don't use untreated greywater if someone in your household is sick, if you wash nappies or when you use certain chemicals, including bleach and dyes. You might also have to change some of the cleaning agents you use.

If your garden is smaller than the calculated figure or you have **no garden**, consider a treatment system that allows your treated greywater to be used in the toilet (150 L per person per week on average) and/or washing machine (190 L per person per week). ■

MORE WATER INFORMATION

- Greywater is a complex substance and there are many things to consider if you're to use it safely and to maximum benefit. The NSW Department of Water and Energy (www.deus.nsw.gov.au) has a very comprehensive set of guidelines for greywater use in households, including figures to help you calculate your water use and needs. There's a link from its greywater main page.
- Saving water in your home* (CHOICE, October 2007) contains tips and product recommendations to help you conserve water.
- A rainwater tank is an ideal adjunct to any water-saving measures you carry out, and CHOICE, November 2007, reports the results of our test of pumps for rainwater tanks.



ISTOCKPHOTO

Greywater tends to be overused; sick-looking plants could be suffering from overwatering, rather than from the chemicals in the greywater.

GREYwater GARDENING CALCULATOR

USE YOUR OWN FIGURES:

Amount of greywater produced by your household each week: _____ litres. Divide this figure by 20:
= _____ square metres of lawn or garden

OR

USE THE AVERAGE FIGURES:

Number of people in your household x 35:
= _____ square metres of lawn or garden

CHOICE verdict

Using untreated greywater on the garden can be relatively cheap and easy, but can be risky for several reasons:

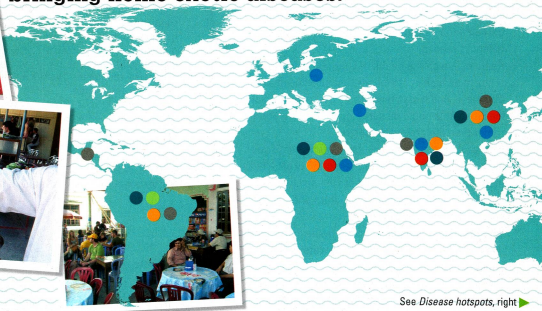
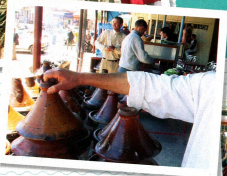
- It could expose you to disease-causing pathogens.
- Damaging salts and chemicals could kill your plants and ruin the soil.
- Runoff could escape your boundaries and create problems for neighbours.

Installing a greywater treatment system will give you safer water and more options to reuse it, but it's expensive and needs regular maintenance. Buying one probably won't save you much money on water costs over time, but it might save your garden — a valuable part of your house — if you can't use tap water in times of high-level water restrictions.

Not only your garden will benefit. Any sort of greywater recycling will reduce how much water you use and the amount of water going into the sewerage system. Combined with water conservation measures and a rainwater tank, you'll be doing your bit for the environment.

Don't catch the travel bug

Visit the world's exotic destinations without bringing home exotic diseases.



See Disease hotspots, right ►

nutshell

- Do your research and visit a travel doctor before jetting off.
- Get travel insurance — you can't afford not to have it.
- If you get sick after returning from overseas, tell your doctor which countries you've visited in the past 12 months, as some infections can take six weeks to a year to incubate.

Australians love to travel, taking more than five million trips overseas every year. But our adventurous streak has its downside — around 20,000 cases of Australians in some form of trouble overseas are dealt with by the Department of Foreign Affairs and Trade (DFAT) each year, including over 700 hospitalisations and over 100 evacuations for medical treatment.

Which?, CHOICE's sister publication in the UK, conducted a survey on 'holiday injury hotspots', in which members related their experiences of a total of 21,230 holidays. It found that 11% of respondents had fallen ill or were injured while travelling in the previous 12 months — with stomach problems taking the number one spot. The ill-health hotspot award went to India, with 52% of visitors who travelled there falling ill, followed by 47% of travellers to Peru and 42% of those who visited Sri Lanka.

To ensure that you don't come home with more than just happy snaps from your next jaunt, arm yourself with CHOICE's healthy travel guide — and make the trip of a lifetime memorable for the right reasons.

Make Google your friend

Before you go, you'll need to suss out potential health risks — and don't rely on your travel agent. A Swiss study published in the *Journal of Travel Medicine* found an investigator posing as a traveller was given no spontaneous health information by half the travel agents he visited, despite malaria being a high risk in the country he was asking about. While your travel agent may be

more forthcoming, it's also wise to seek independent advice on the country you wish to travel to.

Some countries are on the government's 'not to travel' or 'advised against' lists, which are updated on a regular basis with new threats and health alerts. These can be found on DFAT's travel website, www.smarttraveller.gov.au. Among other things, the site also contains advice on up to 150 destinations and their potential risks, tips on travelling with children and contact details for Australian embassies and consulates around the world. You can also register your details there beforehand so you can be traced in an emergency. *More information*, page 34, has a list of other helpful sites.

Visit a travel GP

Go to your GP (or, ideally, a specialist travel doctor) six to 12 weeks before you depart, to allow time for the appropriate vaccinations — some require a series of jabs. Which vaccines you need will depend on the country (and region) you're visiting, and this is where the expert knowledge of a travel doctor comes in handy.

No matter where you're going, make sure your childhood vaccinations (such as tetanus, whooping cough, measles, mumps, rubella) are up to date, and if you're over 65 a travel doctor should also advise the pneumonia vaccine before travelling overseas. Influenza vaccine will lessen the chances of being struck down where medical care is hard to come by. *Disease hotspots*, above, gives a general idea of what you're up against in global terms.

Disease hotspots

- **Rabies** (Africa, Asia, South America). A fatal virus transmitted by the bite of animals (usually dogs). Whether you need this jab depends on the type of trip you're taking and how quickly you'll be able to get treatment — you're not so likely to need it on a package tour stopping at tourist spots.
- **Yellow fever** (Africa, South America). A virus carried by mosquitoes. Some countries require a yellow-fever vaccination certificate as a condition of entry into the country.
- **Malaria** (Africa, Asia and Central and South America). Malaria is a parasite carried by mosquitoes that kills around 1.3 million people a year. Anti-malarial drugs are available but can have serious side effects. Avoid getting bitten in the first place — use repellent and wear long, loose white clothes at night.
- **Hepatitis A** (Africa, Asia, South America). This viral disease of the liver is transmitted through contaminated

food and water. There's a combined hep A and B vaccine or a combined hep A and typhoid vaccine.

- **Typhoid fever** (Asia, Africa). This bacterium is usually transmitted by dirty fingers handling food. Vaccination is highly recommended if you're travelling to areas where sanitation is poor.

● **Avian flu** (Asia, parts of Europe, Africa and the Middle East). The occurrence of avian influenza A H5N1, to give it its official title, being spread from birds to humans is rare and there's currently no proof of human-to-human contamination. Your best defence against 'bird flu' is to stay away from domesticated birds (so don't bother with that charming-looking bird market) and only eat well-cooked poultry.

Japanese encephalitis, tick-borne encephalitis, meningitis and cholera jabs may also be recommended, depending on where you're travelling to.

Travel insurance can be as much as 40% cheaper online. Shop around to ensure you're not paying hefty commission rates.

Travelling with medication

If you're taking medication, you'll need to find out if it's legal in the country you intend to visit — contact the country's embassy or high commission. It's best to get a letter from your doctor outlining what your medicine is, how much you'll be taking and that it's for your own use. Leave the medicine in its original packaging so it's clearly labelled with your name and dosage instructions, and take enough to last the trip, as it may not be available overseas.

For more information about travelling with medication, go to the Medicare website, www.medicareaustralia.gov.au.

Travel insurance

Taking out comprehensive travel insurance is vitally important and will ensure you're covered for general medical expenses, any existing medical conditions, hospitalisations and medical evacuation.

The Australian Government has Reciprocal Health Care Agreements (RHCA) with New Zealand, the UK, Ireland, Finland, Sweden, the Netherlands, Italy, Malta and Norway, which cover the cost of any immediate treatment you may require. While this provides a safety net for Australians travelling to those countries, an RHCA won't cover a medical evacuation back to Australia (which can cost, in extreme cases, up to \$300,000). It also won't cover any health problems encountered while travelling to and from those countries.

When buying travel insurance, shop around to ensure you're not paying hefty commission rates. Independent research conducted by CHOICE found that travel insurance can be as much as 40% cheaper online. But ask the

insurer what activities and situations are exempt (such as adventure sports if you plan to take part in any).

The Insurance Ombudsman Service recommends thoroughly reading the Product Disclosure Statement (PDS) and policy wording of your travel insurance policy to get a full understanding of any conditions, exclusions and limitations that apply, what you need to do in order to make a claim and what's expected of both you and your insurer.

If you're planning to use the travel insurance available when buying a ticket on your credit card, get a copy of the policy wording from the provider and make sure it meets your personal needs and situation (does it cover existing medical conditions, for example?). >

Did you know ?

How to avoid deep-vein thrombosis

Deep-vein thrombosis (DVT) occurs when clots form in the blood vessels in the legs — it can lead to a heart attack and stroke. DVT is often referred to as 'Economy Class Syndrome' because sitting in cramped conditions for long periods can increase your risk, though recent research from New Zealand revealed that you're more likely to get DVT from sitting at your desk for extended periods than sitting on a plane.

Risk factors include a family history of DVT or pulmonary embolism, recent surgery, smoking, being obese, pregnant or over the age of 40.

In order to reduce your risk, during the flight:

- Stand up and walk around regularly and do exercises such as leg stretches every half-hour.
 - Drink at least a litre of water per five hours of flight. Avoid alcohol and caffeinated drinks before and during the flight.
 - Wear loose-fitting clothing.
 - Avoid sleeping tablets as they limit your mobility.
 - Avoid crossing your legs and elevate them when possible.
- Talk to your doctor before flying if you have any risk factors for DVT.

'Gastro pack' saves the day

Simon from Sydney got more than he bargained for when he ordered a burger in Vietnam.

"In 2000 my partner and I travelled for a month in Vietnam. We were pretty adventurous with the food, eating from street vendors and trying things we couldn't even identify — all with no problems.

"About three weeks into the trip we reached Hanoi and ordered a hamburger in a tourist café — a couple of hours later I started feeling rough. I spent much of the next couple of days on the toilet with a raging temperature that was just below the 'go straight to hospital' threshold. Fortunately we'd bought a 'gastro pack' at the travel medical centre back in Sydney, which included the usuals like rehydration salts, diarrhoea stopper (Loperamide, which I didn't use), antibiotics and a flowchart that gave diagnostics to work out if you should go to hospital, and what to do otherwise.

"A couple of days later I was still unwell but we were keen to get up into the north-west of Vietnam, so I started on the antibiotics included in the pack and within a couple of hours was starting to feel better. The next day I was fine to travel."

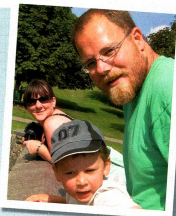


PHOTO COURTESY OF SIMON

Avoid being bitten by mosquitoes — use repellent and wear a long-sleeved shirt and long pants.

Avoiding 'Bali belly'

While sampling the local food and drink is one of the great pleasures of travelling, local delicacies can also play host to bugs that could leave you seriously ill. Here are some tips to minimise your risk:

- Always wash your hands thoroughly before eating.
- In countries where the water is unsafe, drink (and brush your teeth with) bottled water — always check the seal on the bottle. Beer, wine and carbonated beverages are fine as long as they're in a sealed can or bottle, as is coffee or tea made with boiling water.
- Avoid ice in countries where the water is unsafe.
- Avoid undercooked, uncooked or reheated food, salads, and unpeeled fruit and vegies.
- Avoid dairy products, shellfish and food that you can see being handled.
- Opt for freshly cooked food, peelable fruits and foods in cans or sealed packs.
- Choose busy restaurants serving local food and always use clean plates and cutlery. Don't assume your hotel's buffet is risk-free.

If illness strikes

Always carry your insurance company's emergency assistance card with you — most insurance companies provide 24-hour advice to travellers. Often your insurer will make arrangements for you to have treatment.

If you suffer from diarrhoea while away (and we were told around 50% of travellers will), it's important to keep hydrated. Seek medical attention if symptoms last more than four days, if your diarrhoea contains blood, if you have a fever or if symptoms persist after 24 hours for children, the elderly and those with existing stomach problems. It's a good idea to buy a specialised medical traveller's kit from a travel doctor if you're travelling to areas with poor sanitation. It'll typically contain rehydration salts, antibiotics and Loperamide (a 'stopper' for when you can't afford to be glued to the toilet seat). ■

THE BASICS OF HEALTHY TRAVEL

- Go to a travel health specialist and get the appropriate vaccinations for the area you're travelling to.
- Take out insurance to cover hospital treatment, medical evacuation and any activities such as adventure sports.
- To try to avoid being bitten by disease-carrying mosquitoes: pack repellent and a long-sleeved shirt and long pants.
- Carry a traveller's medical kit containing items such as headache tablets, antacids, antiseptic lotion, cotton wool, Band Aids or similar, latex gloves, safety pins, insect repellent and hand sanitiser. Specialised kits for diarrhoea are also available from a travel doctor.
- Boil, cook or peel food you're preparing yourself and drink bottled water.
- Avoid animals such as dogs and monkeys — they could be carrying rabies.
- Have a check-up on return if you've been ill.

MORE INFORMATION

- www.australia.gov.au/Australians_Travelling.
- www.smarttraveller.gov.au.
- The Travel Doctor: www.tmdc.com.au.
- World Health Organization: www.who.int/en.
- The Travel Health Advisory Group: www.welltogo.com.au.
- Centres for Disease Control and Prevention: www.cdc.gov.

On test

Home entertainment, whitegoods, household and personal appliances — they're all tested here.



CHOICE has its own testing laboratories, where experienced technical staff put products through their paces. We use test methods from Australian standards, as well as developing our own in order to match the way consumers use a product in reality. We buy most of the products we test, to maintain our independence from manufacturers and so that we know what you're faced with in the shops. Our recommendations are based on a product's quality and performance, with no hidden bias.

Inside

36 Home theatre



44 Folding bikes



48 Car GPS



Plus

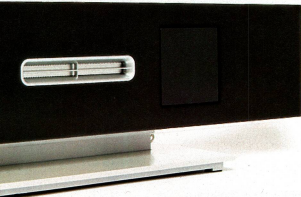
52 Micro hifi systems

55 Hair straighteners

58 Dual-mode cordless phones

62 Fridge thermometers

For more product tests go to choice.com.au



Sound effects

Even in the \$1500–\$2000 range, some home theatre systems have very disappointing sound.

nutshell

► Size isn't everything, but there's a point where being small can limit sound quality.
► Even at these quite high prices, there are big differences in sound quality.
► Clever technology may have some advantages, but there's usually a compromise involved.

Home theatre is largely about sound. Big pictures may be engaging, but to get something like a cinema experience at home, a theatre system has to deliver sensational sound — and that's not just volume. It's about clear dialogue, realistic sound effects and a bass that can not only punch you in the chest when there's an explosion, but also allow smooth transitions from the lowest to the highest notes in the soundtrack.

The systems CHOICE purchased for this test cost between \$1499 and \$1999, but overall we're not very impressed. Some of the brands traditionally associated with speakers fared a little better than the others, but generally at these prices we'd expect more bang-bang for your buck.

Dodgy discs

If you rent DVDs, it's almost inevitable a fair proportion will have been damaged in some way. We were very disappointed to find that, apart from the HARMON KARDON and JBL, the machines we tested didn't do well at playing discs with faults. It's the main reason only these two models are in the *What to buy* list (right).

You can avoid damaging a DVD to some degree by always pressing the centre boss in the DVD case before removing the disc, and always holding it by the edges. If you need to clean it, use a dry lint-free cloth and always wipe from the centre to the edge — never wipe around the surface because this is more likely to create scratches that will give the player trouble.

Two of the systems on test (YAMAHA and PIONEER) don't come with a DVD player — if you have one already, you can just hook it up. However, our listening panel gave them sound quality scores of just 56% and 55% respectively, so we don't think it's a worthwhile option.

Standby energy

Most manufacturers need to lift their game in this area. Standby energy use (when the system is switched off with the remote control but is still plugged into mains power) is way too high in most of these products — apart from the SONY, which uses about a quarter of a watt, and the PHILIPS and SAMSUNG, which manage just over 1 W each. >

What to look for

- It's impossible to measure sound quality objectively in a store, but you can rely on your hearing to a large degree. Take along a CD or DVD with music you know well to play. Don't be afraid to turn it up loud. Even though you may rarely listen to music at high volume, it'll be very disappointing if the product you buy can't hack it when you throw a party.
Listen for smooth transitions from low to high notes. Low notes shouldn't be boomy or have only one tone and highs shouldn't be harsh or screechy. If the store has a listening room, ask for the speakers to be placed in roughly the sort of configuration they're likely to be in your room.
Where it's not possible to hear the system before you get it home, check that you can take it back if you're unhappy with the sound. If the store won't agree, look elsewhere — these systems aren't cheap and you want to be happy with yours.
- If you're looking for a system with a DVD player, can it handle all the music and video formats you're likely to play (take discs to the store to check), and all the regions you're likely to buy DVDs from? Some had trouble with our test discs even though they claimed to support a format.
- Check the connections you'll need to hook up to your TV.
- Check all the connectors and cables are included — they were for all the products in this test. Extras like this add up.



- The display and controls on the main unit should be easy to understand and use, so you can use the system if you lose the remote.
- If the system needs separate power for the subwoofer or rear speaker, do you have enough power points?
- Wireless rear speakers will save you some cabling from front to rear, but you'll still need to supply power to them. In this test only the PHILIPS has this feature.
- Automatic calibration helps set up a system. The PIONEER, SAMSUNG and SONY in this test have it and it worked well.
- Lip sync control allows you to delay the sound so it matches the vision. 'Not in sync' sound occurs with some digital screens (plasma or LCD usually), which have to process the video but not the sound, causing a slight gap.

What to buy



JBL CSP630 Bundle

PRICE \$1999

SPEAKERS 5.1 (five speakers plus subwoofer)

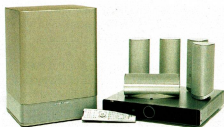
SOUND QUALITY The panel was very impressed with this system's clear, natural and detailed sound, but one panellist noted some "muddiness" in the lower mid tones. Technical tests show limited higher frequencies and some distortion in the bass, but aside from the PIONEER/WHARFEDALE combo, this system was a clear winner.

GOOD POINTS

- Connections on the main unit are colour-coded.
- Easy-to-use onscreen controls.
- Good remote control that can be used to control other products.
- Good instructions.

BAD POINTS

- No auto-calibration (see *Setting up your home theatre*, page 38).
- Stands are complicated to assemble.
- Limited (but easy-to-use) front panel controls.



HARMAN KARDON HS 500

PRICE \$1999

SPEAKERS 5.1 (five speakers plus subwoofer)

SOUND QUALITY Technical testing found a lack of bass and high frequency response, but panellists were largely positive and responded well to its smooth movement from lows to highs. They did notice it's a bit dull and lacks some detail in the higher as well as the lower middle frequencies.

GOOD POINTS

- Easy-to-use on-screen controls.
- Good remote control that can be used to control other products.
- Good instructions.

BAD POINTS

- No auto-calibration.
- Limited (but easy-to-use) front panel controls.

To get something like a cinema experience at home, a system has to deliver sensational sound, with clear dialogue and realistic sound effects.

About the rest

Most of the other systems were considered OK for sound quality by the panel. However, the BOSE and SONY didn't fare so well because they both try to be more than they really are.

- The BOSE product promotion says it will "...deliver much of the performance you would expect from a five-speaker system", meaning that its three speakers (two plus subwoofer) project their sound to try and replicate five-speaker sound, but panellists found the phantom rear and centre speakers unconvincing — "weird" was one description. However, they were a little happier with its stereo sound, and it's easy to use.
- The SONY satellite speakers are very small, don't cope well with high frequencies and lack clarity and power. However, it has auto-calibration and is easy to use.
- The JAMO system would've made it into the *What to buy* list, but for its poor error correction. It has some small gaps in the middle to low frequencies, but the panel was impressed with the overall clarity of sound from these relatively small speakers. It's easy to use as well.
- With the SAMSUNG, frequency response testing indicated a hole in low frequencies and a lack of high frequency response.

Panellists also noted the lack of smooth transition from high to low frequencies and found the sound flat and tinny. An annoying noise also seems to come from the DVD player. On the plus side, it has auto calibration.

- The panel found the top notes in the PHILIPS fatiguing and harsh. The bass was boomy and it lacked clarity with dialogue. There's also an annoying fan noise, but it's easy to use.
- In frequency response tests the YAMAHA performed as well as the JBL and PIONEER/WHARFEDALE systems and rated best for its subwoofer. Unfortunately, the rear speakers don't deal well with higher frequencies. Some overall distortion and the centre speaker sounding unnatural to the panel mean we wouldn't recommend it for surround sound, but the panel found it OK for stereo.
- The panel found the PIONEER's sound fatiguing. Tests showed the centre channel doesn't supply enough power and there's a gap between the surround speakers and the somewhat limited subwoofer. However, it's easy to use, has an auto-calibration feature and lots of control options.

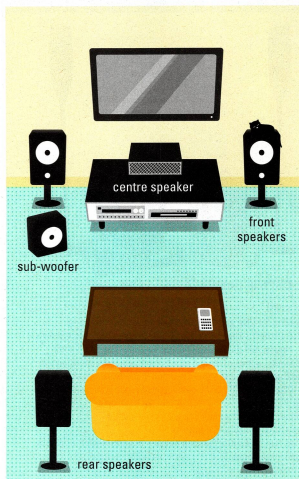
Most makers need to lift their game in the area of standby energy use: it's still way too high in most of these products.

SETTING UP YOUR HOME THEATRE

Ideally you'd be able to place all the speakers equidistant from where you sit to listen, but it's more likely you'll have a setup closer to the illustration on the right.

Here are some tips to help you get the best sound from your home theatre system:

- The best position for your front speakers is at ear level (when you're seated), so sounds don't seem to come from the ground or sky.
- The rear speakers are best positioned to the side and slightly behind and above the listener.
- The centre speaker handles most of the noises from the central focus of the picture, such as dialogue. It should be level with or just below the screen.
- The subwoofer can be placed on the floor almost anywhere in the room, as most people can't tell where bass sounds are coming from. Play around with the location, as small placement adjustments can make a big difference to sound quality. Generally, though, try to avoid putting it in a corner, as this can make the sound boomy.
- It's not uncommon to place some speakers closer to and others further away from the listener. If you do this, you'll need to calibrate the speakers. All systems enable you to change the relative volume levels on each speaker and to delay the sound so it's synchronised — but it's a tricky job and could take you some time. Auto-calibration systems will reduce the pain a good deal.



PRODUCT	PERFORMANCE						FEATURES			SPECIFICATIONS		
	Overall score (%)	Listening panel score (%)	Frequency score (%)	Ease of use score (%)	Standby energy score (%)	Error correction score (%)	Regions played	Radio tuner	Auto-calibration	Lip sync	Number of speakers	Contact
WITH DVD PLAYER												
JBL CSP 630 Bundle	68	78	60	64	30	56	All	FM			5.1	www.ehifi.com.au
Harmon Kardon HS 500	62	71	40	66	30	76	All	FM			5.1	www.ehifi.com.au
Jamo A 102 HCSII	61	59	70	75	40	40	All	AM / FM			5.1	www.qualifi.com.au
Samsung HT-TXQ120	58	52	60	66	80	30	0, 2, 3, 4	FM	✓	✓	5.1	www.samsung.com.au
Philips HTS9800W/55	57	49	60	71	80	40	0, 2, 3, 4	FM		✓	6.1	www.philips.com.au
Sony DAV-IS10	55	44	50	71	100	30	0, 2, 4	AM / FM	✓	✓	5.1	www.sony.com.au
Bose 3-2-1 Series II	50	46	50	77	30	20	0, 2, 3, 4	AM / FM			2.1	www.bose.com.au
WITHOUT DVD PLAYER												
Yamaha YHT-585B	59	56	70	69	50	na	na	AM / FM		✓	6.1	www.yamahamusic.com.au
Pioneer VSX-917-K/HTB	57	55	60	70	40	na	na	AM / FM	✓		5.1	www.pioneer.com.au

PIONEER WITH WHARFEDALE SPEAKERS



Our sister organisation in New Zealand asked us to include this system (the PIONEER VSX-917-K with WHARFEDALE Diamond 9 speakers), which is sold in NZ for around the same price as some of the more expensive products in this test.

It did very well in the listening and frequency response tests (88% and 70% respectively) and it's available in Australia, but not as a single product. You'd have to buy the receiver from a store that stocks PIONEER equipment. The WHARFEDALE Diamond speakers are available from various stores; we suggest you call the distributor, IAG, on 02 9521 4844 to find out which stores stock them near you.

The speakers are quite bulky and have a recommended retail price to match: \$2600 (on top of the cost of the receiver). However, one panellist gave this system top marks in every category and the others agreed it's very good. They were particularly impressed by its balance, clarity and natural sound. One panellist thought it lacked a little power in the centre speaker, however. Overall, though, it's the pick of this test — apart from its price.

USING THE TABLE

Scores The overall score is made up of the following:

- Listening panel: 60%
- Frequency response: 15%
- Ease of use: 15%
- Standby energy: 10%

Error correction score isn't included in the overall score, so you can directly compare systems with and without a DVD player.

Number of speakers The .1 indicates a subwoofer that handles low frequencies. All in this test are active, which means they have their own built-in amplifier.

Price is recommended retail, as of November 2007.

TABLE NOTES

na Not applicable: no DVD player.

HOW WE TESTED: THE LISTENING PANEL



Jennifer Sochackyj

Jennifer Sochackyj is a Masters student in sound design at the Australian Film, Television and Radio School (AFTRS).



Tim Chaproniere

Tim Chaproniere is a Masters graduate in sound mixing and design from the AFTRS.

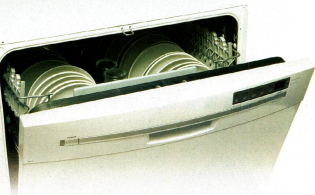


Steve Wilson

Steve Wilson is a mastering engineer with Reaktor Audio Services.

Thanks to all of them for their expertise and patience while listening to the same pieces of audio over and over again, locked in a special listening room at the National Acoustic Laboratories.

- Our testers set up each system in a special listening room at the National Acoustics Laboratory so that the speakers were around 2 m from the listener and at around head height. They positioned the subwoofer on the floor close to the front speaker on the left or put it in the best listening position.
- They calibrated using a sound meter to ensure the sound levels were the same at the listening position.
- Our expert panel (above) then appraised the sound quality when playing stereo sound, DVD surround-sound music and a number of DVD surround-sound movie sequences. In particular, they listened for distortion, how well the subwoofer dealt with low frequencies and whether there was a seamless crossover from the speakers to the subwoofer at lower frequencies.
- They moved around to check the size of the 'sweet spot' (where the sound balances and sounds best), and they assessed the ability of the system to localise individual sounds so they appear to be coming from a particular direction.
- Our testers carried out frequency response tests to show the system's ability to produce tones across the spectrum of human hearing (from 20 Hz to 20 kHz). Failure to produce tones evenly can result in unpleasant sounds or even loss of some frequencies.
- Testers assessed ease of use, looking at the remote control, front panel display and controls, onscreen displays where applicable, radio tuning, ease of setting up and whether the documentation supplied was clear and useful.
- The power used in standby mode or equivalent (when it's been turned off by the remote control but is still connected to the power) was measured by our testers using specially calibrated meters — the less power the better.
- To see how well systems with a DVD player could handle a DVD with imperfections, testers played our specially made test disc in each.



Clean and dry?

Dishwashers wash well, but not all deliver on drying performance.

nutshell

- Some models now give good energy efficiency and good drying performance.
- Even dried-on gunk comes off in a 'normal' wash.
- Our tests suggest that in order to get a very good overall performance, a dishwasher's cycle needs to be at least 100 minutes.

We've said in the past that it's hard to get a dishwasher that does everything well, but in our test of 11 new models priced from \$849–\$1899, we've found some that come pretty close.

All the tested models washed our grimy load reasonably well, so what really separated the pack was drying performance, with drying scores ranging from 55% to 97%. Our two new top models, as well as being very good at tackling last-night's spaghetti bolognese, were excellent at drying the dishes too, so your load can go from dishwasher to cupboard straightaway. And while there's still a relationship between drying performance and energy consumption, it's not as strong as it's been in the past, with some of the top drying models also being relatively energy-efficient as well.

Are you a rinser or a scraper?

Can't resist giving the plates a bit of a rinse before putting them in the dishwasher? You're not alone. CHOICE's 2006 appliance use survey found that of the 1074 members who took part (99% of whom use a dishwasher at home), 59% rinse their dishes before loading them in.

While it may have been necessary to pre-rinse before loading your dishes into older, less advanced models, these days it's an unnecessary waste of water — a good scraping is all they need. We test each dishwasher's washing performance by getting it to clean a load of dishes and cutlery coated with food that's been left to dry on overnight — we neither rinse nor scrape. As most machines now wash these clean on the 'normal' program, there's no need to give an additional rinse.

If you do pre-rinse (perhaps you don't run the dishwasher every day and don't want it to become smelly) try using the dishwasher on its 'fast' program, which uses less water.

Short vs long

The cycle times of the machines in the table vary from 96 to 158 minutes (one FISHER & PAYKEL in our previous test washed in just 73 minutes), but don't let a quicker cycle time influence your buying decision. It seems in order to get a very good overall performance, the cycle time needs to be at least 100 minutes — all our recommended models took slightly longer than this time to go through their paces. >

What to look for

THE BASICS

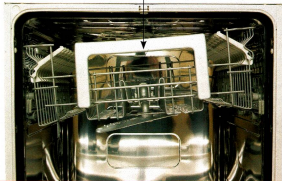
- Look for a good energy rating: the more stars (up to six) the better. One thing to check is which program the star rating is based on: a 'normal' program or some special or 'eco' program.
- Consider whether your normal dinnerware will fit into the dishwasher without being crowded or hitting the spray arms. Take along a few of your day-to-day dishes, such as a large dinner plate and a tall glass, and try them out in the shop to see if they both fit at the same time. Spin the spray arms (gently) to make sure they don't hit the plate or glass.

USEFUL FEATURES

- **Anti-flood hose** This hose has an electric cut-off near the water tap connection, which means it stops leaks in the hose, not just in the machine. We've previously reported which machines have any kind of anti-flood device but now almost all have some level of protection. An anti-flood hose is high-level protection.
- A **concealed heating element** stops items being damaged if they fall through the basket, and also means food can't drop onto the element and cause a burning smell.

For more on features listed in the table, see CHOICE, July 2006, or go to choiceextra.com.au and click on that month under 'dishwashers'.

- A whole rack or individual tines that **fold down** make for more versatile loading.
- The ability to **lower one side of the upper shelf** makes it easier to fit tall glasses.



What to buy

Two of the newly tested models made it into the *What to buy* list. We're also profiling the two recommended models from the previous test again (CHOICE, August 2007).

Rinsing your dishes before putting them in the dishwasher is a waste of water: most modern machines remove even dried-on food.



WESTINGHOUSE SB916WK

BUILT-IN

PRICE \$949

GOOD POINTS

- Excellent drying performance.
- Very good washing performance.
- The top basket is easy to adjust and can fit tall glasses and large plates at the same time.
- Has delayed start function, 'time to go' display and concealed element.
- Has a child lock.

BAD POINTS

- Nothing in particular.



AEG F40760 Favorit Sensorlogic

FREESTANDING

PRICE \$1099

GOOD POINTS

- Excellent drying performance.
- Very good washing performance.
- The top basket is easy to adjust and can fit tall glasses and large plates at the same time.
- Has delayed start function and concealed element.

BAD POINTS

- Nothing in particular.



AEG F86080UM Favorit Sensorlogic

BUILT-IN

PRICE \$1599

GOOD POINTS

- Excellent drying performance.
- Very good washing performance.
- The top basket is easy to adjust and can fit tall glasses and large plates at the same time.
- Has delayed start function, 'time to go' display and concealed element.

BAD POINTS

- Nothing in particular.



WESTINGHOUSE SB908WK

BUILT-IN

PRICE \$849

GOOD POINTS

- Excellent drying performance.
- Very good washing performance.
- Can fit tall glasses and large plates at the same time.
- Has a child lock.
- Concealed element.

BAD POINTS

- Nothing in particular.

About the rest

- All the newly tested models except the SMEG SA8605 X scored higher than 70% overall.
- Both the ASKO D3122 and MIELE G 2243 SCi are excellent at drying and good at washing and the MIELE is very easy to use — but they aren't quite as good overall as the top-scoring models.
- The BOSCH Lifestyle Automatic, MIELE G 1243 SC and BLANCO BFD10X all have excellent drying performance but can't fit tall glasses with large plates. The BOSCH is also extremely water-efficient.
- The FISHER & PAYKEL DD605ZW (Dishdrawer) is very easy to use and excellent at drying but doesn't fit large plates — at all.
- The ELECTROLUX LX4011SB is very good at washing, extremely easy to use and very good at drying but it's the least water-efficient of all the models in the table.
- The BOSCH Classic Electronic and SMEG SA8605 X were both good at washing and but not so good for drying performance. The BOSCH is extremely water-efficient, however.

WHICH DETERGENT?

About a year ago (CHOICE, Jan/Feb 2007), nearly 200 CHOICE Home Testers rated dishwasher detergents. Despite big differences in price, they didn't find equally big variations in performance. As one said, "All the products were good and we'd be happy to use any of them."

Tablets in particular tend to cost more than powders. Some tablets claimed to be '3-in-1', with enzymes to break down food and grime, a rinse aid and a function to prevent limescale build-up. Others were '4-in-1', with an extra function claimed to clean glasses, and even '5-in-1', with an ingredient to "remove encrusted stains". Our Home Testers, however, didn't find big performance differences, despite the extras.

PRODUCT	PERFORMANCE										FEATURES				
Brand / model (in rank order)	Overall score (%)	Washing score (%)	Drying score (%)	Ease of use score (%)	Energy efficiency score (%)	Water efficiency score (%)	Energy used (kWh)	Water used (L)	Noise (dB)	Cycle time (min)	Height-adjustable top basket	Foldable / removable times	Anti-flood hose	Half-load option	Eco wash
# Westinghouse SB916WK (A)	81	83	92	95	60	72	1.64	21	51	106	✓	F			✓
AEG F40760 Favorit Sensorlogic (A) (B)	80	88	91	85	60	61	1.62	25	48	115	✓	F	✓		✓
AEG F86080UM Favorit Sensorlogic (A) (C)	80	81	92	85	65	67	1.46	23	48	104	✓	F	✓		✓
# Westinghouse SB908WK (A)	80	82	93	73	63	75	1.54	20	51	101	✓	F			✓
# Asko D3122 (A)	79	74	97	73	60	82	1.63	17	50	148					✓
# Miele G 2243 SCi (A)	79	74	94	85	65	77	1.48	19	41	142	✓	F, R	✓		
# Bosch Lifestyle Automatic SGS46M62AU (A)	78	66	91	73	72	93	1.22	13	43	100	✓	F			
Conia CDW1211	78	72	86	73	77	81	1.07	17	54	149	✓	F, R			✓
# Fisher & Paykel DD605ZW (A)	78	64	91	83	73	88	1.19	15	48	112	na	R		✓	✓
Fisher & Paykel DW60CDW1 (A)	78	81	69	88	76	84	1.11	16	48	108	✓	F			✓
# Miele G 1243SC (A)	78	76	97	55	66	79	1.44	18	41	144	✓	F, R	✓		
# Electrolux EX4011SB (A)	77	81	86	95	59	61	1.66	25	49	116	✓	F	✓		✓
Whirlpool ADP6940 Auto Clean 6th Sense (A)	77	68	89	66	68	96	1.36	12	41	148	✓	F	✓	✓	✓
# Blanco BFD10X	75	65	91	73	64	86	1.49	15	43	105	✓	F	✓		✓
Blanco BFDW6W (A) (D)	75	76	83	73	63	70	1.55	21	45	98	✓	F	✓		
Baumatic BAD6002 (A) (E)	74	61	78	78	83	85	0.88	16	53	135	✓	F		✓	
Blanco BFDW4W (A) (D)	73	70	80	45	74	84	1.17	16	48	158					✓
# Bosch Classic Electronic SGU53E75AU (A)	73	70	58	73	86	92	0.77	13	48	141	✓	F			
Smeg STH905 (F)	73	59	80	63	74	99	1.16	10	45	101	na	F	✓	✓	✓
Electrolux EX500ISC	72	70	73	83	68	73	1.35	20	44	105	✓	F			
Kleenmaid DW34X	68	69	70	48	64	79	1.51	18	43	96	✓	F	✓		✓
# Smeg SA8605 X	68	76	55	60	64	77	1.5	19	47	105	✓	F	✓	✓	✓

USING THE TABLE

Indicates a newly tested model.

Scores The overall score is made up of:

- Washing performance: 35%
- Drying performance: 25%
- Ease of use: 10%
- Energy efficiency: 15%
- Water efficiency: 15%

Noise All the dishwashers are fairly quiet, but there's a noticeable difference between the quietest (41 dB) and the loudest (54 dB).

Features See *What to look for*, page 40.

Water connection

- **H or C** You can connect the dishwasher to hot or cold water.
- **C rec** The manufacturer recommends connecting to a cold tap, and the dishwasher heats the water itself (all dishwashers have a heater).
- **C only** You can only connect to a cold tap.

Type

- **FW** Freestanding, with a worktop (can generally be built in as well).
- **BI** Built-in — mightn't have a top or side panels; must be enclosed to prevent it from tipping forward when fully loaded dishes are pulled out.
- Some models are also available **semi-integrated (SI)** — you fit a front panel to the door to match the rest of your kitchen cupboard doors; or **fully integrated (FI)** — the whole front of your machine can match your kitchen, with the controls hidden inside the door.

Running costs This is an estimate of how much it'll cost over 10 years for water and electricity if you wash a full load every day using a normal or 'auto-sensing' cycle, based on 15 cents per kWh for electricity and \$1 per 1000 L water.

Price Recommended retail, as of September 2007

TABLE NOTES

na Not applicable — only has one basket, or in the case of the double Dishdrawer, two separate baskets whose height doesn't affect each other.

ns Not stated

SI Semi-integrated.

(A) All the models in the table have the basic white finish except the Electrolux EX500ISC, Kleenmaid DW34X and the AEG F86080UM (stainless steel). Dishwashers with this footnote also have a version with a stainless steel finish, generally at a slightly higher price. Some also have other versions or types available.

(B) The AEG F40860M, F44080IM and F80850VIM are technically similar and will perform the same on the tested program. Differences are type and colour.

(C) The AEG F80880, F86070IM, F86070VI and F80880IM are technically similar and will perform the same on the tested program. Differences are type and colour.

(D) Discontinued, but may still be available in some shops.

(E) The Lofra LD06001 is technically similar and will perform the same on the tested program. Differences are type and colour.

(F) The Smeg is wider and shorter than a standard dishwasher and only has one basket, but still with 12 place settings.

SPECIFICATIONS						COSTS	
Dimensions (cm, H x W x D)	Water connection	Place settings	Type	Contact		Running cost (\$/10 years)	Price (\$)
82 x 60 x 59	C rec	12	BI	www.westinghouse.com.au		973	949
85 x 60 x 60	C only	12	FW	www.andico.com.au		980	1099
82 x 60 x 57	C only	12	BI	www.andico.com.au		882	1599
82 x 60 x 59	C rec	12	BI	www.westinghouse.com.au		917	849
82 x 60 x 57	C rec	14	BI	www.asko.com.au		956	1349
85 x 60 x 57	H or C	14	BI (SI)	www.miele.com.au		877	1899
81 x 60 x 60	C only	14	FW	www.bosch.com.au		715	1399
85 x 60 x 58	H or C	12	FW	www.pebble-ltd.com.au		647	499
82 x 60 x 57	C rec	12	BI	www.fp.com.au		723	1784
85 x 60 x 60	H or C	12	FW	www.fp.com.au		676	899
85 x 60 x 60	H or C	12	FW	www.miele.com.au		857	1699
82 x 60 x 58	C rec	12	BI (SI)	www.electrolux.com.au		997	1379
85 x 60 x 60	ns	12	FW	www.whirlpool.com.au		785	1249
82 x 60 x 57	C rec	13	FW	www.blanco-australia.com		886	1899
82 x 60 x 57	C only	12	FW	www.blanco-australia.com		925	1099
85 x 60 x 60	C only	12	FW	www.thinkappliances.com.au		541	1199
82 x 60 x 57	C rec	12	FW	www.blanco-australia.com		700	925
81 x 60 x 57	C only	14	BI	www.bosch.com.au		470	1249
58 x 86 x 55	C only	12	BI	www.smeg-australia.com		674	2990
82 x 60 x 59	C rec	12	BI	www.electrolux.com.au		836	1429
82 x 60 x 57	H or C	13	FW	www.kleenmaid.com.au		932	2299
86 x 60 x 57	H or C	14	BI	www.smeg-australia.com		888	1390

HOW RELIABLE DO SUBSCRIBERS RATE THEIR BRAND?

We asked subscribers whether their dishwasher (bought in or after 2000) had needed repairs in the previous 12 months. Overall, 15% needed repairs in that time, making them the most unreliable appliance in our survey. The numbers in brackets are the number of responses we received for that brand. Differences of 9% or more are statistically significant. Unfortunately we didn't receive enough responses to report on reliability for AEG, CONIA and BAUMATIC.

PERCENTAGE NOT NEEDING REPAIR

All dishwashers (5049)	85
Bosch (318)	95
Miele (697)	92
Whirlpool (152)	90
Westinghouse (414)	89
Simpson (146)	88
Blanco (127)	87
Dishlex/Electrolux Dishlex (790)	87
Asko (350)	83
Fisher & Paykel (830)	80
Smeg (140)	79
LG (288)	75
Kleenmaid (152)	71

HOW WE TESTED



- Our testers checked how well the machines tackle a full load of dirty dishes by measuring out and placing equal amounts of egg yolk, spinach and baby cereal on plates, butter on saucers, tomato juice in glasses and tea in cups. They also put egg yolk and cereal onto cutlery.
- It was all then left to dry for 15–18 hours before being loaded into the machines, washed (using the sensor wash if the machine has one, or the normal cycle if it doesn't) and dried.
- Drying performance score was based on the number of drops and/or streaks left on the dishes half an hour after the end of the wash.
- Each machine was tested at least twice and the scores averaged.
- Testers also measured the amount of water and energy used in a cycle, and how easy it is to load the dishwasher.

FOR PEOPLE WITH A DISABILITY

An occupational therapist from the Independent Living Centre (NSW) assessed the newly tested models for suitability for people with certain disabilities.

- None of these new models is particularly suitable for people with a cognitive impairment or for wheelchair users.
- For those with a vision impairment, the controls on the MIELE G 2243 SCI and BLANCO BFD10X have audible feedback and the detergent and rinse aid compartments are easy to use.
- For those with arm weakness, the BLANCO BFD10X has a door that's easy to open and it's easy to clean and adjust components.



Unfolding the future

Want to save 1.3 tonnes of greenhouse gases and get fit at the same time? So which folding bike is best for you?

nutshell

► On test: seven folding bikes, ranging from \$399 to \$1800. And the cheapies fared rather well. ► The bikes each have their strengths and weaknesses, and the one that best suits you depends on what you want to use it for.

Commuting by bike is an ideal way to fit exercise into your lifestyle, and studies show that you're more likely to maintain exercise that's built into your daily behaviour over the long term. Cycling to work could also save you thousands of dollars a year on a second car. And you can do your bit for climate change: driving 20 km each work day creates 1.3 tonnes of greenhouse gases a year.

Commuting by *folding* bike makes things easier. It can be more easily used in conjunction with public transport than a regular bike — and there are no doubt many people who'd like to catch public transport, but it won't quite get them from door to door. A few kilometres' leisurely ride to or from the station or bus stop won't get you too hot and sweaty, and it's a lot easier to manage a folded bike on the train or bus and to store one at work.

You can also put a folding bike in the car boot and drive to a suitable riding place, or put it on a plane or train to exotic cycling locations.

Folders on test

With these uses in mind, CHOICE tested seven folding bikes in a range of designs and prices, to see what sort of quality and ride you get. Where there was a choice, we chose the biggest-selling model from each manufacturer. Two bike experts assessed each bike for quality of construction and components, ease of use and rideability. We also got six keen recreational riders to try them out.

Folding and unfolding Claims about folding time ranged from five to 20 seconds, though it might take some practice to get up to speed. The STRIDA was the outright winner for ease of folding and unfolding, with the DAHON and YEAH also rating well. The BIRDY was considered the most complex and difficult.

Weight and portability The lightest and most portable bike is the STRIDA, which can be either wheeled or carried when folded. The GIATEX is the bulkiest and heaviest, though you can also wheel it along. The more

What to look for

FEATURES

- **Luggage racks** Some can carry panniers, or you can get a special carrier (such as for the BROMPTON). Some just can't carry luggage.
- **A carry bag** will help protect the bike and prevent it from dirtying you, other people and your other bags.
- **Mudguards** A good idea if you're not just a fair-weather rider.



THE BASICS

- **Carrying it** Can you wheel it when it's folded? Does it lock together, or do you need to strap it closed? Can it stand up when folded?
- **The ride** Try it: a folding bike rides differently. The acid test is to corner one-handed while signalling with the other. If you mainly use it for short rides, ease of folding and carrying may seem more important than ride quality. But a bike that's no fun to ride won't be ridden.
- **Bikes that fold** with the chain enclosed inside will be less likely to get grease on your clothes.



Profiles

Different bikes will appeal to different riders, so we've profiled all of them.

BEST RIDE/FOLD COMBO



DAHON Boardwalk D7

PRICE \$560

- The experts rated the DAHON highest overall: its construction and quality were considered reasonably good, and they were very impressed by its handling and bike-like ride. It's one of the heaviest (including rack and mudguards), so might be better suited to those who want a folding bike for storage reasons or for taking in the car to go cycling, rather than commuting. The experts thought it was excellent value for money: "Probably the best ride/fold combo [in this test]."
- Trialists considered it a stable bike with good control, and it rated highly for all aspects of ride performance. The folding action and mechanism also rated well.

TRIALISTS' COMMENTS

- "The bike was fun to ride. Felt very stable and suitable for riding longer distances."
- "How simple. How easy. It's a pleasure to fold."

conventional folding bikes are mostly 11–13 kg, which is much the same as a regular bike. Weight aside, they can be bulky and awkward to carry.

Folded size Most compact when folded is the BROMPTON, and it's the only bike in our test that meets the Queensland Citytrain size guidelines. At the other end of the scale, the telescopic folding of the GIATEX results in a package only a little smaller than a regular mountain bike.

Ride Our trialists rated the DAHON, BIRDY and YEAH equal top for ride, but the BIRDY didn't score as well as the others for comfort. The BROMPTON wasn't far behind, let down by only having only three gears. The unusual STRIDA was a distant last. The profiles have more details about each bike.

Fixing punctures Only the BIRDY has quick-release front and rear wheels; the GIATEX has a quick-release front wheel. For the rest you need a spanner. The wheel sizes are smaller than on regular adult bikes, so carry spare tubes with you — you might not be able to buy them easily.

If a folding bike isn't for you...

Folding bikes address some of the issues facing would-be cyclists who are short on space or want to cycle in conjunction with public transport. But dollar for dollar, you'll get a much better quality of bike overall if you buy a regular bike rather than a folder.

More and more train stations in Australian towns are installing bike lockers — storing a regular bike in one of these is an option if you don't need it at the other end. For a commute of only a kilometre or two, an alternative to a bike is a folding scooter: these days you can get 'grown-up' versions of the micro scooters, with larger wheels providing a more comfortable ride.

Discuss your needs with a reliable bike shop to get a bike that suits you, and take some bikes for a test ride. You may be able to change the saddle, tyres and other components to customise the bike, and choose extras such as lights, mudguards, a stand and a luggage rack. >

What to buy \$

DAHON Boardwalk D7	\$560
YEAH YRA062	\$599

These two were rated best overall, but no one bike has everything, and the bike that's best for you depends on how you want to use it and the terrain you'll be riding on. While the DAHON was rated top or equal top by both the trialists and the experts, its bulk and weight mean it could be better for throwing in the car boot and taking to a bike track than for commuting with. As an all-rounder, the YEAH is a good buy. See the profiles for what all the different bikes are good for.

The Strida was the outright winner for ease of folding and unfolding, with the Dahon and Yeah also rating well.

GOOD
ALL-
ROUNDER



YEAH YRA062

PRICE \$599

- The YEAH has basic components and adequate quality, and the experts reckoned it rode reasonably well. However, it's more expensive than other folding bikes of similar quality. It's a little lighter (it doesn't have a luggage rack) and more compact than the DAHON, and might therefore be more suitable for commuters. Considering the ride, the quality and its portability, it's a good all-rounder.
- Our trialists found it a comfortable and solid bike to ride, and it rated highly for all aspects of ride performance as well as for folding.

TRIALISTS' COMMENTS

- "Beautiful, smooth ride, comfortable and easy to handle."
- "So straightforward — the easiest [to fold] of the lot."

BEST
QUALITY



BIRDY Orange

PRICE \$1800

- Our experts rated the BIRDY equal second, scoring it well for overall quality and ease of use, with quick-release wheels and good-quality gears and brakes. However, folding is complex and cumbersome.
- Rated well for ride performance with trialists, who liked the gear-changing mechanism and shock absorption, but folding was considered difficult and smaller riders commented on the long frame. Note, however, you can buy the bike with a handlebar stem that's angled more towards the seat, making the reach a little shorter and more suited to smaller riders.

TRIALISTS' COMMENTS

- "I felt stable on this bike. Steering responsiveness good and not too tight. Didn't feel too many bumps — loved the shock absorbers."
- "Fairly tricky to [fold] — you would have to practise this a lot. I guess once you get the hang of it, it would be OK. The most difficult of the bikes tested."

Profiles continued over the page ▶

Profiles (continued)

Many bikes weren't assembled well and needed fine-tuning to get the wheels true and all the parts operating smoothly. Ask the shop to do this for you.



VALUE
FOR
MONEY



PROGEAR Cross Road

PRICE \$399

- While the PROGEAR's components are mostly of only basic quality, the experts agreed they worked well and the bike functioned and rode very well — they rated it equal second overall. As the cheapest bike on test, it was considered excellent value for money.
- A number of trialists commented about the handlebars feeling wobbly, and not being able to stand off the saddle for hill climbing. Folding was rated fiddly by some and easy by others.

TRIALISTS' COMMENTS

- "Compact and light, a pleasant ride for shorter distances."
- "Good gear ratio for hills but can't stand out of the saddle to ride up. Gears don't go high enough for on the flat or down hills."



MOST
COMPACT
WHEN
FOLDED



BROMPTON M3L

PRICE \$1365

- Our experts rated the BROMPTON fairly well for quality: it has a good-quality Sturmey Archer internally geared rear hub, but other components are basic. It rode fairly well on flat ground but the gearing (only three gears) told against it on hills and the free-hanging rear wheel (which becomes a neat bike stand) was disconcerting over bumps. Quirky, and may suit some riders well, but at the price it rated poorly for value.
- Trialists rated it fairly well for ride performance, but the limited gears were a letdown. The fold mechanism is a little tricky but straightforward once learned, and when folded it's very compact and easy to carry.

TRIALISTS' COMMENTS

- "Biggest drawback is having only three gears. Not a very good gear-changing mechanism, which looks flimsy on an otherwise very good-quality bike."
- "Handlebar height too low and fixed. Too much pressure on the hands."

PRODUCT	PERFORMANCE			FEATURES				SPECIFICATIONS			
Brand / model (in rank order)	Overall score (%)	User trial score (%)	Expert score (%)	Number of gears	Type of gear shifter	Luggage rack	Mudguards	Frame	Wheel size (inches)	Dimensions when folded (cm, H x L x W)	Size when folded (m ²)
Dahon Boardwalk D7	85	80	90	7	Twist grip	✓	✓	Steel	20	65 x 86 x 38	0.21
Yeah YRA062	78	80	75	6	Twist grip		✓	Aluminium	20	66 x 81 x 31	0.17
Birdy Orange	70	60	80	8	Trigger / lever	(A)	(C)	Aluminium	18	62 x 77 x 43	0.21
Progear Cross Road	70	60	80	6	Twist grip			Aluminium	20	72 x 83 x 46	0.28
Brompton M3L	65	70	60	3	Trigger / lever	(B)	✓	Steel	16	55 x 61 x 33	0.11
Giatrix Sport 6 speed BICI 660	60	50	70	6	Twist grip	✓	✓	Steel	20	82 x 115 x 35	0.34
Strida 3	35	30	40	1	na	✓	✓	Aluminium	16 (D)	23 x 53 x 117	0.14

USING THE TABLE

Overall score Equal weighting was given to the trialists' and experts' scores.

User trial score Riders were asked to score their overall impression of the bike after unfolding and adjusting it, then riding, folding and carrying it.

Expert score Based on our experts' overall impression of the bikes, taking into account:

- Quality of construction, folding mechanism, wheels and components.
- Ease of use (removing and fitting front and rear wheels, and using brakes and gears).
- Impressions on riding the bike.

Prices are recommended retail, as of December 2007.



ADJUSTABLE
LENGTH

GIATEX Sport 6 Speed BICI 660

PRICE \$895

- The GIATEX scored fairly well with the experts for quality and ease of use, but the problem for this bike was the unusual folding mechanism: its tubes telescope to make the bike shorter, rather than folding and collapsing down like most others. This is very easy to use, though not as compact a fold as most other bikes on test. The experts found the telescoping tubes tended to move (the inner tube rotates within the outer tube) when ridden, especially under hard riding. The resulting frame flex was disconcerting.
- Triallists were similarly unimpressed with its ride, and though they thought the adjustable centre tube resulted in a tailored fit (which could also be good if different-sized people share the bike), it was rated down because of its bulky folded size and its heavy weight.

TRIALISTS' COMMENTS

- "Weird having the saddle offset to the right of the mainframe. Gears needed adjusting — didn't click in correctly. Felt rather unstable looking like one of the most sturdy bikes tested."
- "Fantastic — you can adjust the distance between the seat and the handlebar."

Even the lightest bike becomes awkward if you have to hold it one side to avoid dirtying your clothes.



DESIGN ICON:
HANG IT ON
YOUR WALL

STRIDA 3

PRICE \$630

- Both experts were impressed with the quality of the STRIDA's build, and clever features such as its folding mechanism and greaseless drive belt (instead of a chain). However, the ride, in the words of one of our experts, was "diabolical" — it's very unstable, especially when the seat is high up for taller riders, and hard to ride up hills (you can't stand on the pedals, and it has only one gear).
- Triallists found its design intriguing and reasonably comfortable, and it's easy to fold and lightweight to carry. However, its ride was considered too unstable.

TRIALISTS' COMMENTS

- "Interesting and innovative but not a serious proposition — the ride is just too weird and no gears would be no good for Sydney [or anywhere with hills]."
- "I felt decidedly unstable for most of the test ride. I only had to look sideways and the bike turned. Each time I stopped and restarted I felt I was at the risk of the unknown."

	Contact	Price (\$)
2	www.advancetraders.com.au	560
9	www.charlespurtonimports.com.au	599
4	www.birdy.com.au	1800
0	www.progears.net	399
6	www.greenspeed.com.au	1365
0	www.giatex.com.au	695
2	www.strida.com.au	630

TABLE NOTES

* Includes luggage rack and mudguards, when provided.

na Not applicable: only one gear.

(A) Optional front and rear racks for panniers.

(B) Has a custom luggage system in which a bag clips to a bracket at the front of the bike.

(C) Optional extra.

(D) Non-standard wheel specific to this model.

HOW WE TESTED

Triallists Six experienced leisure cyclists rode each bike on a 3.5 km paved course with only moderate hills. They also unfolded and folded each bike, and carried it 30 metres.

Experts The bikes were assessed by two bike experts: Steve Hogg, a road racing bicycle expert, and John Hardwick, editor of *Mountain Biking Australia* [www.bicyclingaustralia.com]. After assessing a bike's quality of construction and ease of use (see *Expert score*, far left), they took it for a short test ride, which included hills.



Steve Hogg



John Hardwick



Driving force

GPS for cars keep getting better, with lots more features — and also cheaper.

nutshell

► Ten models made our *What to buy* list — but even the three that didn't are still good.

► Pretty soon you'll be able to receive live traffic updates from your GPS.

GPS (Global Positioning System) is going from strength to strength, and may yet take on the humble street directory in the popularity stakes. Our latest batch of 13 models, priced from \$280 to \$799, found 10 good picks, and though three models just fell short of making the *What to buy* list, they're still good — it's just that the others are a bit better.

As GPS technology advances, more features are being added to in-car models while prices are coming down — which is sure to broaden their appeal to the average motorist. One model in our *What to buy* list, the AWA, is a good 'no frills' option and costs just \$348. But if money isn't an issue and you're after a GPS that does it all and does it well, you'll be happiest with the \$799 TOMTOM.

What's new in GPS?

In the not-too-distant future there'll be a universal gadget that does everything — guides you places, sends emails, plays music, takes pictures — and GPS units are well on their way to being that gadget.

Of the newly tested models, six have Bluetooth capability (which means that if your phone has it too, your GPS can act as a hands-free phone) and all but the GARMIN and NAVMAN have an MP3 player. Some models also allow you to insert an SD card to view pictures and videos (see the table on page 50 for photo/video capabilities). But don't expect digital-camera quality from your GPS, as most models produced low-quality images with thin, jagged lines across the screen. Only the TOMTOM can display photos well. The SMART NAVI claims to have a photo display option but the tested model wasn't able to read our SD card.

Soon you'll also be able to receive live traffic updates on your GPS, through the newly created digital SUNA Traffic Channel. Intelmatics Australia, a subsidiary of the Royal Automobile Club of Victoria, has announced it's introducing the feature, already commonplace in Europe, North America and Japan. It was expected to reach Melbourne by the end of 2007, though a full rollout isn't expected till later in 2008. MIO looks set to be the first compatible brand — watch this space. >

What to buy

Models in the *What to buy* list are profiled in rank order. For more features, see the table, page 50.



TOMTOM GO 720

PRICE \$799

GOOD POINTS

- Widescreen (16:9) format.
- Full route displayed automatically before each trip.
- Excellent controls and onscreen display.
- Automatic change from day to night screen.
- Excellent voice instructions.
- Best photo display.
- Optional 'over the speed limit' warning.

BAD POINTS

- No printed manual.
- Vibrates a little on rough roads.



GARMIN Nuvi 250W

PRICE \$499

GOOD POINTS

- Widescreen (16:9) format.
- Excellent controls and onscreen display.
- Automatic change from day to night screen.
- Very good voice instructions.

BAD POINTS

- No printed manual.
- Spoken instructions can be late when turns or roundabouts are close to each other.
- No full-route display option.



MIO C520

PRICE \$499

GOOD POINTS

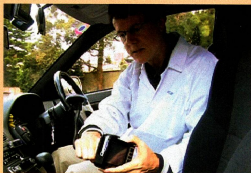
- Widescreen (16:9) format.
- Excellent controls and onscreen display.
- Optional 'over the speed limit' warning.

BAD POINTS

- No printed manual.

HOW WE TESTED

- Our tester checked in-car performance by assessing the reliability of voice commands, the timeliness and accuracy of turn instructions and directions, and errors in map data. He also checked satellite reception in Sydney's CBD and looked for addresses and travel destinations outside Sydney, including checking whether a route between Adelaide and Kangaroo Island could be calculated — this uses a ferry and in previous tests not all models factored this in.
- For ease of use, he looked for a Quick Install guide, good instruction manual and secure windscreen mount. He assessed brightness and clarity of the screen, usability of controls and ease of navigating menus. He checked the readability of maps and information display and the timing of turn instructions, plus the screen's adjustability and viewing clarity in daylight, bright sunlight and at night.
- For safety, our tester looked for warnings about obeying traffic rules even if the system gives contradictory instructions, and checked for a safety mode limiting use of controls and that controls are large enough to operate while driving.
- He checked the systems after three hours in an oven at 60°C to simulate being in a car on a hot summer's day.



AUSTRALIAN MAP DATA

This can generally be updated from the manufacturers' websites and/or retailers as it becomes available (currently once a year), though most updates are expensive and you might decide not to do it every year:

- AWA \$149; GARMIN \$150; KOGAN \$79–\$129; NAVMAN \$159; MIO \$159; TOMTOM \$149; UNIDEN \$180; VDO DAYTON \$129.
- **Price not stated** PIONEER, SHINCO, SMART NAVI, VOXTRACK.
- **Not available** HITACHI.

About the rest

Though these models aren't quite as good as those in the *What to buy* list, they still scored well overall.

- The SMART NAVI DOTN-400B has very good ease of use and in-car performance scores but couldn't read files on an SD card, even though it says it has a photo option. It also has a poor safety score.
- The VDO Dayton PN 3000 and KOGAN FIO both have very good in-car performance scores but have 'tinny' voice instructions.
- With all three models our tester experienced errors in the driving instructions they gave.



NAVMAN S30

PRICE \$399

GOOD POINTS

- Best overall screen quality in daylight, bright sunshine and at night.
- Automatic change from day to night screen.
- Optional 'over the speed limit' warning.

BAD POINTS

- No no-toll option or full-route display option.
- No printed manual.
- Muffled voice instructions.



SHINCO GM-408

PRICE \$499

GOOD POINTS

- Widescreen (16:9) format.
- Excellent onscreen display.
- Excellent voice instructions.
- Optional 'over the speed limit' warning.

BAD POINTS

- Stylus required for some entries.



UNIDEN GNS 8360

PRICE \$390

GOOD POINTS

- Excellent onscreen display.
- Automatic change from day to night screen.
- Very good voice instructions.
- Very good printed manual.
- Optional 'over the speed limit' warning.

BAD POINTS

- Stylus required for some entries.

Very good news for consumers: more features are being added to car GPS at the same time as the prices are coming down.

Profiles of models in the *What to buy* list are continued overleaf ▶

What to buy, continued

Some models let you view pictures and videos, but only the Tomtom can display photos well.



AWA X200

PRICE \$348

GOOD POINTS

- Excellent onscreen display.
- Excellent voice instructions.
- Very good printed manual.

BAD POINTS

- Nothing in particular.



HITACHI MMP-401B

PRICE \$549

GOOD POINTS

- Widescreen (16:9) format.
- Optional 'over the speed limit' warning.

BAD POINTS

- Vibrates a fair bit even on good-quality roads.
- Very annoying voice.
- Stylus required for some entries.



VOXTRACK GPS850

PRICE \$499

GOOD POINTS

- Widescreen (16:9) format.
- Excellent voice instructions.
- Very good printed manual.

BAD POINTS

- Comparatively heavy and bulky.
- Vibrates a little on rough roads.

PRODUCT	PERFORMANCE					FEATURES					SPECIFICATIONS			
Brand / model (in rank order)	Overall score (%)	In-car performance score (%)	Ease of use score (%)	Operational safety score (%)	Points of interest score (%)	Walking option	Bluetooth	MP3 player	Photo / video	Routing options: no tolls / no unscaled roads / no highways	Upload points of interest	Memory card type	Claimed battery life (hours:minutes)	Dimensions (H x W x D, mm)*
Tomtom GO 720	87	86	90	90	58	✓	✓	✓	✓ / -	✓ / - / ✓	✓	SD / MMC	5:00	83 x 118 x 24
Garmin Nüvi 250W	84	88	89	73	39	✓			- / -	✓ / ✓ / ✓	✓	SD	5:00	75 x 120 x 19
Mio C520	82	85	88	63	49	✓	✓	✓	✓ / -	✓ / ✓ / ✓		SD	ns	80 x 125 x 20
Navman S30	82	87	85	67	43				- / -	- / ✓ / -	✓	SD	ns	78 x 112 x 20
Shinco GM-408	82	89	81	73	54	✓		✓	- / -	✓ / - / -	ns	SD / MMC	ns	75 x 115 x 28
Uniden GNS 8360	82	84	89	57	49	✓	✓	✓	✓ / ✓	✓ / ✓ / ✓	✓	SD	0:55	80 x 115 x 22
AWA X200	81	85	87	53	54	✓		✓	✓ / -	✓ / - / -	✓	SD / MMC	ns	78 x 94 x 25
Hitachi MMP-401B	81	90	76	73	58	✓		✓	✓ / -	✓ / - / ✓	ns	SD / MMC	2:00	75 x 115 x 28
Voxtrack GPS850	81	85	88	60	35	✓	✓	✓	✓ / ✓	✓ / - / -	ns	SD	3:30	87 x 148 x 28
Pioneer AVIC-S2	80	89	79	63	43	✓		✓	- / -	✓ / ✓ / ✓	✓	SD	ns	88 x 100 x 25
Smart Navi DOTN-400B	78	84	84	40	47	✓	✓	✓	✓ / ✓	✓ / - / -	ns	SD	ns	87 x 126 x 21
VDO Dayton PN 3000	76	83	79	60	25		(A)	✓	✓ / -	✓ / - / ✓		SD	4:00	83 x 125 x 22
Kogan FIO	71	81	74	40	28	✓		✓	✓ / ✓	✓ / - / ✓		SD / MMC	3:00	80 x 135 x 30

USING THE TABLE

Scores The overall score is made up of:

- In-car performance: 45%
- Ease of use: 40%
- Safety: 10%
- Points of interest: 5%

• For more on the tests see *How we tested*, page 49.

Features For an explanation of the features in the table, see *What to look for*, page 51.

Price Recommended retail, as of November 2007.

TABLE NOTES

ns Not stated

* Depth is measured with the antenna folded against the body if applicable.

(A) Optional.

(B) Via internet auctions.



PIONEER AVIC-S2

PRICE \$549

GOOD POINTS

- Automatic change from day to night screen.
- Optional 'over the speed limit' warning.

BAD POINTS

- No printed manual.
- Display is quite dim.

What to look for

BASIC FEATURES

- Display** The screen should be large and glare-free, and show information such as a 2D or 3D map view, distance to the next turn, current street name, distance to destination.
- Data entry** Key in a few well-known destinations to see how easy it is to enter addresses and routing preferences. If you can, check a few places in the area you're most likely to use the GPS to see how well the mapping data covers it.
- Voice instructions** Make sure they're clear and loud enough to hear over the hum of the engine; is there a volume control — and can you stand the voice?
- Installation and portability** Check how easy the system is to install, and how easy it is to remove and carry — it's better not to tempt thieves by leaving it in your car.



FEATURES ALL (OR MOST) TESTED MODELS HAVE

- The system **stores your address**.
- It lets you **select a location** on the displayed map.
- Colour LCD display** in landscape format.
- Touchscreen**.
- USB PC connections and SD memory card slot**.
- English spoken instructions** — plus at least another three languages to choose from.
- Options to calculate **fastest and shortest routes**.
- Day and night mode** In the latter, the screen changes colour and turns down the brightness so it won't blind a driver looking at it in the dark.
- Points of interest** Schools, police stations, car parks, petrol stations, airports and railway stations; ATMs and hospitals, except the KOGAN; doctors' surgeries, except the GARMIN and the KOGAN.
- Option to **search** for points of interest.



FEATURES IN THE TABLE

- Walking option** This lets you plot a route for pedestrians — walking the wrong way down one-way streets, for example, or taking a short-cut through a park.
- Bluetooth** It can connect with some Bluetooth-enabled mobile phones — if this is a deciding factor for you, check the list of compatible phones before you make your choice.
- MP3 player** You can play MP3 files on your GPS, though not usually while navigating.
- Routing options** You can program it to exclude toll roads, unsealed roads or highways from the route.
- Upload points of interest** from manufacturers' websites and/or enter your own.

Contact	Price (\$)
www.tomtom.com	799
www.gme.net.au	499
www.mio-tech.com.au	499
www.navman.com.au	399
www.en.shinco.com	499
www.uniden.com.au	390
www.bigw.com.au	348
www.hitachi.com.au	549
www.voxson.com.au	499
www.pioneer.com.au	549
www.destinator.com.au	499
www.siemensvdo.com.au	599
www.kogan.com.au	280-330 (B)



Small hifi systems

Some have good sound. Some even have a TV screen — great for a teenage bedroom.

nutshell

- ▶ You can get some quite good sounds for \$200–\$350.
- ▶ Connecting up an MP3 player lets you play hours of music without having to fiddle with CDs.
- ▶ A system that can play DVDs could come in handy for rainy days.

A micro system offers a simple solution for all-in-one music in small spaces. There's no hard and fast definition of a micro, but they usually have two detachable speakers and a central unit with a CD and/or DVD player, and possibly a number of other connections for MP3 players and so on — see *What to look for* on page 54. As their name suggests, they're designed for smaller areas and all the models we tested wouldn't take up too much space in a bedroom or study.

We bought systems between \$200 and \$350 and, though we didn't have high expectations, were pleasantly surprised. Some have a good mix of features as well as quite acceptable sound.

Not so portable

They may look small, but these systems aren't as portable as you might think. They weigh in at 6–10 kg, which is more than most people would like to carry around, and they're also awkward, as the speakers don't attach to the main unit and their surfaces are often slippery.

Overall, price isn't a good indicator of sound quality, as you can see in the table. The best micros can produce

acceptable sound at a reasonable volume, but the worst are poor and produce distorted sound or are noticeably lacking in some frequencies. It's a good idea to take a well-loved CD as a reference when you're out shopping so you can immediately hear if the machine's a turkey.

We had to buy three of the LENOX MCD1300 before we got one that wasn't faulty. It came bottom anyway.

Onscreen

Four of the micro systems — the DGTEC, both LENOX models and the TEAC MCDV10 — have an LCD screen. The LENOXes have an analogue TV tuner, while the DGTEC and TEAC have both analogue and standard-definition digital. Image quality on all the screens is comparable with what you'd expect from a portable DVD player.

If you've got a caravan or holiday home where it'd be handy to play your music, films and TV on one system, one of these micros could be just the job. They're also perfect for a teenager's bedroom. >

PRODUCT	PERFORMANCE				FEATURES		
Brand / model (in rank order)	Overall score (%)	Sound score (%)	Ease of use score (%)	Standby power score (%)	Sound effects	Plays MP3 CDs	MP3 connection
Sony Micro Hi-Fi Component System CMT-BX3	85	82	86	100	V, H	✓	USB, line in
Ministry of Sound DVD Micro System with iPod Docking Station MOSDV139IP	81	79	82	90	V	✓	USB, line in
DGTEC Mini Combo TV DM8501	78	84	61	70	V		USB
Panasonic SC-PM45 CD Stereo System	78	73	85	100	S, V	✓	USB, line in
Panasonic SC-PM54 CD Stereo System	78	73	85	100	S, V, H	✓	Line in
Sharp Micro Component System XL-UH220H	74	69	80	100	V, H	✓	USB, line in
Sony Micro Hi-Fi Component System CMT-NEZ33	72	70	84	60	V, H	✓	Line in
Lennox Combo TV-DVD-VCD-CD-MP3Player MCD1200	71	70	60	100	S, V	✓	
TEAC DVD Micro System MC-DV639	69	64	81	80	V, H		USB
Sharp Micro Component System XL-UR5H	67	57	83	100	V, H	✓	USB
TEAC Micro DVD System with Digital TV MCDV10	54	50	62	70	V		USB
TEAC DVD Micro System MC-DV610	45	35	73	60	V, H		USB, line in
Lennox Combo TV-DVD-VCD-CD-MP3Player MCD1300	35	25	60	50	S, V	✓	

Overall, price isn't an indicator of sound quality. Take a well-loved CD shopping with you to help hear if a machine's a turkey.

What to buy



SONY Micro Hi-Fi Component System CMT-BX3

PRICE \$349
SOUND QUALITY

The expert panel liked its sound, but thought it was possibly a little too crisp for some types of music. Probably best for classical music.

GOOD POINTS

- MP3 player connection.
- USB connection.

BAD POINTS

- No mute button.



MINISTRY OF SOUND DVD Micro System with iPod Docking Station MOSDV139IP

PRICE \$249
SOUND QUALITY

Its bass performance and natural vocals impressed the panel.

GOOD POINTS

- Plays DVDs.
- MP3 player connection.
- USB connection.
- Memory card slot.
- iPod dock.

BAD POINTS

- A little noisy when reading DVDs.



DGTEC Mini Combo TV DM8501

PRICE \$299
SOUND QUALITY

As an all-rounder, this player impressed the panel with its sound. It's clear, has good bass and sounds natural. It's their pick if you're looking for something to cover a wide range of music.

GOOD POINTS

- Built-in LCD screen.
- Plays DVDs.
- Has an analogue and a digital TV tuner.
- It got the best score in the listening test.
- USB connection.

BAD POINTS

- No AM tuner.
- No MP3 player connection.
- Claims to play MP3 CDs, but wouldn't in the test.

(What to buy is continued overleaf.) ▶

						SPECIFICATIONS		
TV tuner	Screen (cm)	Tape deck	Radio tuner	Multi-CD player (number of CDs)	iPod dock	Dimensions (D x W x H, cm)	Weight (kg)	Contact
			AM/FM			24.5 x 49 x 30	7.3	www.sony.com.au
			AM/FM	✓		20.5 x 52.5 x 29	7.8	www.ministryofsound.net.au
A/SD	17.8		FM			22.5 x 49.5 x 29	6.6	www.dgtec.com.au
			AM/FM			23 x 44 x 32	6.0	www.panasonic.com.au
		✓	AM/FM	5		25 x 46 x 36	9.8	www.panasonic.com.au
			AM/FM	5		26 x 54.5 x 33.5	10	www.sharp.net.au
		✓	AM/FM			24 x 45 x 27	6.6	www.sony.com.au
A	14.0		FM			27 x 47 x 29	8.5	www.lenoxx.com.au
			AM/FM			18 x 44 x 26	5.6	www.teac.com.au
		✓	AM/FM			23 x 45.5 x 23	6.5	www.sharp.net.au
A/SD	17.8		FM			22.5 x 49.5 x 29	6.7	www.teac.com.au
			AM/FM			31 x 52.5 x 36	9.2	www.teac.com.au
A	17.8		FM			24 x 46.5 x 27	8.1	www.lenoxx.com.au

USING THE TABLE

Scores The overall score is made up of:

- Sound: 70%
- Ease of use: 20%
- Standby power: 10%

Sound effects

V = Various effects meant to simulate different surroundings, such as a concert hall, or change settings to enhance different types of music, such as jazz or rock.

S = Surround-sound simulation.

H = Heavy bass.

TV tuner

A = Analogue.

SD = Standard-definition digital.

Features See What to look for on page 54 for an explanation of the features in the table.

Prices are recommended retail, as of September 2007.

What to buy (continued)



PANASONIC SC-PM45 CD Stereo System

PRICE \$219
SOUND QUALITY

The panel thought its bass and lower mid-range were a bit thin, but found it quite clear in the higher ranges.

GOOD POINTS

- MP3 player connection.
- USB connection.

BAD POINTS

- None to mention.



PANASONIC SC-PM54 CD Stereo System

PRICE \$329
SOUND QUALITY

The panel described it as having a very warm sound — plenty of bass, which is good for rock or dance music. One panelist noticed some unevenness in higher frequencies and suggested it may not be so good for classical music.

GOOD POINTS

- MP3 player connection.
- Tape deck.
- Five-CD tray.

BAD POINTS

- No USB connection.

About the rest

- The SHARP XL-UH220H sounded slightly "muddy", while panelists quite liked the sound from the SONY CMT-NEZ33, but thought it lacked power. Both are easy to use but the SONY would probably best suit very small spaces.
- The LENOXX MCD1200 lacks some definition with voices and in the lower tones, but the panel was quite happy with its sound. It has a smaller screen than the others with an LCD and equal lowest ease of use score.
- The panel thought the sound from the TEAC MC-DV639 lacked bass. The SHARP XL-UR5H isn't very loud and the panel wasn't particularly impressed with the quality of its sound either. However, they're both easy to use.
- The "lumpy", "muffled" and unbalanced sound from the TEAC MCDV10 didn't impress the panel. Its screen is difficult to read and some controls awkward to use.
- The TEAC MC-DV610 is awkward to set up because it has a separate subwoofer, but it's reasonably easy to use. The panel found its sound poor, sounding "metallic" and tending to distort on some tracks — although it did a little better with dance music thanks to its subwoofer filling in some of the bass. We bought a second one, just to be sure the first wasn't faulty, but there was no improvement.
- Our panel was unimpressed with the LENOXX MCD1300. The first one we bought had a faulty disc drive, the second a faulty LCD screen and the sound was poor. There was lots of distortion, regardless of the type of music; a "cacophony" was one panelist's description of a choral piece. Another described it as "horrible" when playing dance music.

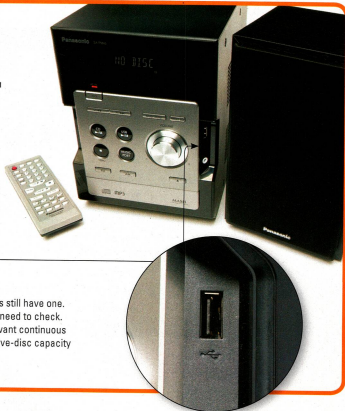
What to look for

USEFUL FEATURES

- All in this test, except the LENOXX models, can play music directly from an **MP3 player or via a USB connection**. The MINISTRY OF SOUND is the only tested model with a dedicated Apple iPod docking station as well as having connections for other MP3 players. However, if you've got an iPod dock with a line-out connection, you could use it with all these products that have a line-in connection.
- **Sound effects** to approximate different listening situations may be useful. The table shows which machines offer this feature.
- All the systems in this test have speakers that are separate from the central unit. Others on the market have **clip-on speakers**, which would make it easier for you to move them around.
- Make sure your system can play a CD of **MP3 files** — in this test, the DGTGEC and the TEAC MCDV10 claimed to, but wouldn't when tested.
- Some systems without screens can **play DVDs**; when connected to a TV they can make for a compact solution in a small room.
- **USB connections** allow you to connect a USB key and play music directly from it. See the table for which have USB or line-in connections

A FEW EXTRAS

- The tape deck is taking a long time to disappear and three of the players still have one.
- All in this test have an FM radio tuner, but if you want an AM tuner, you need to check.
- Systems with multi-CD players are useful for parties, or when you just want continuous music. Only the PANASONIC SC-PM54 and SHARP XL-UH220H have a five-disc capacity in this test.





Tame your frizz and curls

Do without the expense of professional styling and get smooth, sleek and dead-straight hair at home.

nutshell

► On test: 10 hair straighteners ranging in price from \$15 to \$299.

► The \$299 GHD — the bee's knees of hair straighteners — was ranked top of the bunch, "but you can get a good one by spending \$80+."

You can't change the genes that make your hair straight or curly, but now you can easily change the way it looks if you're unhappy with what nature's dealt you, or just want dead straight hair once in a while.

Investing in a good hair straightener, and learning how to use it, can save you a lot of time and money at the hairdresser's. But it must do the job well, gliding smoothly through your hair and leaving it frizz-free all day. And it must do it fast and easily — who's got hours in the morning to do their hair?

To find out which of the many hair straighteners on the market meet all these demands, we had 15 volunteers give us their verdict on 10 widely available ones. For more on the user trial, see *How we tested*, page 57.

What to do, and what not

A hair straightener lets you iron out frizz and tame unruly curls. It breaks down the hydrogen bonds that make hair curly, leaving it straight until it's next exposed to moisture. Ceramic heating elements help eliminate frizz and static electricity so the hair's outer layer looks smooth and shiny. Hair in good condition can withstand the high temperatures a straightener reaches, but it can easily become dry and brittle if you don't look after it properly. Taking into account the following points should help you avoid damage to your hair.

Frequency You can use a straightener every day, but it's best not to if your hair is already weakened from other treatments, such as perming, or regular bleaching or highlighting, which make it more susceptible to breaking.

Temperature Use a hair straightener on a low heat setting (maximum 170°C) if you have fine, heavily bleached or damaged hair. Normal, thick and/or curly hair should be able to cope with temperatures upwards of 180°C.

Method Use a straightener on dry hair. With wet hair you can "boil" the hair shaft, which can lead to breakage. Move it along the section of hair without stopping, so you don't burn your hair. Read and follow the instructions for your straightener too.

Diet Include sufficient protein and iron in your diet. Our hair consists almost entirely of protein, and 15–20% of

our protein intake is used for skin and hair replacement. A low iron level is a common underlying cause of thinning hair in women.

What matters, and what doesn't

Type Most hair straighteners are tong-style. The only scissor-style model in the test was rated lowest overall, with trialists commenting on its "clumsy" and "bulky" design, which they found more awkward to use.

Plate material Most have ceramic or ceramic-coated plates (sometimes with the addition of aluminium or tourmaline), which are claimed to eliminate frizz and static in hair and leave it smooth, shiny and silky — or even "fresh", as PHILIPS Tresemmé claims (its ceramic plate contains antibacterial nanosilver particles). The trialists showed no preference for one type or another.

Plate size Slim to medium-width plates that are suitable for most hair types are the norm. Wider plates may speed up the styling process, particularly for those with longer hair, but they'll make the straightener bulkier and heavier.

Control buttons Some trialists remarked they sometimes switched a straightener off accidentally during use because of the position of the controls — something to check out in the shop. And trialists liked straighteners with a 'ready to use' indicator.

Heat-up time The better straighteners in the test (the top five in the table) reached the desired temperature faster than the rest. This means you won't have to wait long before you can start styling, and the plates reach the right temperature again very quickly after passing their heat into each individual section of hair. Slower heat-up between sections makes for less efficient straightening.

Adjustable heat setting This is useful for people with fine or damaged hair who want to use the straightener at a lower heat.

Accessories Some straighteners have a loop so you can hang them on a hook for storage; others come with a stand or a protective heat mat to rest on, which may fold into a carry bag.

Price points You'll have to spend at least \$80 to get a good straightener — the cheaper ones failed to convince our trialists. >

Use a hair straightener on dry hair and move it along the section of hair without stopping. With wet hair you can 'boil' the hair shaft, which can lead to breakage.

What to buy



GHD IV Styler ghd 4.1B

PRICE \$299

RATING Excellent

FEATURES

- Auto switch-off (after 30 minutes without use).
- 'On' and 'ready-to-use' lights.
- Instructional DVD.

GOOD POINTS

- Very effective at straightening.
- Straightening result lasted longest: more than 12 hours on average.
- Very fast heat-up time.
- Very easy to use.
- Moved very smoothly through hair.

BAD POINTS

- The most expensive in the trial.

TRIALIST COMMENTS

- "Hair was straightened as well as a hairdresser would have done. Excellent."
- "Went over hair smoothly, good design, long-lasting effect. Great for creating different styles."



DIVA Hair Straightener THLC 05

PRICE \$160

RATING Very good

FEATURES

- Stand.
- Carry pouch.
- 'On' and 'ready-to-use' lights.

GOOD POINTS

- Good straightening effect, both immediately and over time, lasting 9–12 hours on average.
- Very fast heat-up time.
- Easy to use.
- Moved smoothly through hair.

BAD POINTS

- One trialist commented that it would've been useful to have instructions on the accessories.

TRIALIST COMMENTS

- "Made my hair dead straight in next-to-no time!"
- "Lightweight, slim and compact design made it very easy to use."



VS SASSOON Premiere Series Total Freedom 230 Cord/Cordless VSP2099A

PRICE \$120

RATING Very good

FEATURES

- With wider than usual plates, it's recommended for use on medium to long hair.
- Can be used cordless (it heats up on a base that's plugged into a power point) or with a 3 m cord.
- Adjustable heat setting.
- 'On' and 'ready-to-use' lights.

GOOD POINTS

- Good straightening effect, both immediately and over time, lasting 9–12 hours on average.
- Very fast heat-up time.
- Easy to use.
- Moved smoothly through hair.

BAD POINTS

- The heaviest in the trial (560 g), which one trialist thought made it "a bit heavy and unstable on the bench".

TRIALIST COMMENTS

- "It heated up quickly and you didn't have to be right next to a power point, but because it heated up on the base, you had to [take care to] keep returning it to the base to keep the optimum temperature."

Did you know ?

- Hair straighteners have become a new burns hazard for children in the home, according to an article published last year in the UK. And because they have two hotplates, which can both come in contact with the skin, they can cause two burns on adjacent parts of the body.
- Adults can generally touch a ceramic surface of 86°C for up to a second before getting burnt, but significantly lower limits apply to the skin of children and elderly people. A hair straightener, though, gets a lot hotter than 86°C (up to and even over 200°C) and will burn skin practically on contact.
- While minor superficial burns of ears, forehead and fingers are recognised hazards of using a hair straightener, take particular care when it's heating up — and remember where you put it. We've heard of people who were burnt on the foot when they stepped on one left on the floor, or caught one by the plates when it was falling, or sat on one left on a chair to heat up ... Ouch!

BEST
BUY

VS SASSOON Pro 230°C Straightener VS2075MPA

PRICE \$80

RATING Very good

FEATURES

- Adjustable heat setting.
- Digital temperature display.
- Protective heat mat, which can be used as a pouch.
- Auto switch-off (after 72 minutes without use).
- 'On' and 'ready-to-use' lights.

GOOD POINTS

- Good straightening effect, both immediately and over time, lasting 9–12 hours on average.
- Very fast heat-up time.
- Easy to use.
- Moved very smoothly through hair.

BAD POINTS

- One trialist remarked she had to hold it in an uncomfortable manner so as not to touch and change the heat setting controls inadvertently.

TRIALIST COMMENTS

- "Hair stayed fairly straight, even after walking through light rain."
- "The padded area on the outside of the plates means you don't burn your head or neck." (Both VS SASSOON straighteners have this fabric coating.)

About the rest

- While the PHILIPS Tresemmé and TIFFANY Pro Series were also rated well for their immediate straightening effect, the PHILIPS was criticised for its awkwardly positioned on/off switch and the TIFFANY for its temperature variation and the time it took to achieve straightening results.
- The remaining four models were all rated worse for their straightening effectiveness.

HOW WE TESTED

The trial

- Fifteen volunteers, all experienced in using a hair straightener, trialled them over five weeks, each using two straighteners per week.
- Trialists used the straighteners in the morning (so they could determine how long the effect lasted throughout the day) on clean, dry and tangle-free hair. They were asked to follow the instructions and user guides provided by the manufacturers.
- We recorded daily relative humidity throughout the trial to check whether it significantly affected trialists' evaluations of the straighteners; it didn't.

The test

- CHOICE's lab measured how long each straightener's plates took to heat up from room temperature to 150°C and 200°C, or the hottest they could manage after 15 minutes, if 200°C wasn't reached.



BRAND / MODEL (IN ALPHABETICAL ORDER WITHIN GROUPS)	TYPE	PRICE (\$)
EXCELLENT		
GHD IV Styler ghd 4.1B (A)	Tongs	299
VERY GOOD		
Divia Hair Straightener THLC 05	Tongs	160
VS Sassoon Premiere Series Total Freedom 230 Cord/Cordless VSP2099A (B)	Tongs	120
VS Sassoon Pro 230°C Straightener VS2075MPA	Tongs	80
GOOD		
Philips Tresemmé SalonShine Elite HP4669/07 (C)	Tongs	90
Wahl Cutec Ceramic/ZA105	Tongs	80
OK		
Joh Bailey Professional Ceramic Travel Straightener JBS75 (C)	Tongs	40
Maxim Professional Straightener HS988C	Tongs	15
Tiffany Pro Series Digital Hair Straightener HST70	Tongs	40
BORDERLINE		
Living Essentials by Mistral Ceramic Hair Straightener LEHS10	Scissors	18

USING THE TABLE

Rating categories (excellent, very good, etc) After using each straightener in the morning, trialists evaluated it for:

- Straightening performance** (immediate effect; smoothness through hair; number of applications required to straighten a given section of hair; and whether the plates were hot enough).
- User friendliness** (overall ease of use; heat-up time; handling and manoeuvrability).
- At the end of each day, they also rated the straightener overall and indicated how long the result lasted.

Type See page 55. Price Recommended retail, as of December 2007.

TABLE NOTES

(A) Currently being replaced by a new model, 4.2B.

(B) Recommended for use on mid-length to long hair, which we took into account in the trial. The rest are suitable for use on all types of hair of various lengths.

(C) Soon to be replaced by a new model.



Best of both worlds

Combine your landline and VoIP calls into one dual-mode phone.

nutshell

► A dual-mode cordless phone allows you to make VoIP calls anywhere in the house, but models with a USB connection need your computer to be on.
► If you keep your landline connection so that you're able to make calls in a power outage, you'll also need to keep a corded phone in the cupboard — cordless models and VoIP won't work without mains power.

Making local and overseas calls using the Voice over Internet Protocol (VoIP) is considerably cheaper than using a landline — see the article on page 25 for general advice on getting into VoIP, and its limitations. On test here are dual-mode cordless phones, which allow you to use the landline or easily switch to the VoIP setting, providing cheap calls over the internet as well as normal landline calls.

All the phones tested have a standard phone connection, where you plug a telephone cable into your phone wall socket and make calls as normal. The phone's base unit has either a physical link to the computer via a USB connection or a connection from the phone to the internet modem or router via a network connection. Phones with a USB connection need your computer to be on and connected to the internet to use VoIP, while the other phones just need access to an active internet connection.

All the phones have the ability to quickly select whether a landline or VoIP call is to be made and all models have selectable ringtones to signal whether it's a landline or VoIP caller.

What type of VoIP user are you?

We tested dual-mode phones with variety of VoIP systems that will appeal to different people, depending

on your computer experience and VoIP contacts. For example, it's no use getting a Skype phone if all your friends use MS Live Messenger, or buying a Session Initiation Protocol (SIP; see right) phone if your ISP (internet service provider) doesn't provide the service.

Skype

Skype (www.skype.com) is the most popular VoIP service at the moment, with millions of users throughout the world. Skype users generally communicate through an internet connection on a computer, but more and more are finding ways to break the direct PC connection through the use of products such as dual-mode phones.

Skype is free to download and there's no setup or subscription fee when talking to other Skype users. Once you register for the service, you then need to create a Skype user name, such as `yourname.anything`, which will be used as your point of contact for other Skype users.

The dual-mode phones that use Skype in this test are all automatically configured to work with Skype.

Although talking to another Skype user free is an attractive option, you're unlikely to only want to talk to Skype users. SkypeOut allows you to call virtually anyone on a landline or mobile for much less than the standard landline rates. You need to buy 'Skype credits' before using this feature.

What to look for

THE BASICS

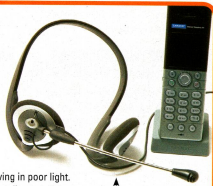
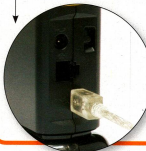
A dual-mode cordless VoIP telephone consists of a handset and base, which is connected to the internet via a **USB connection** or direct network cable. Check the phone comes with the relevant cables to connect to the internet: you'll need USB cables for models that connect through a PC and **ethernet** cables for phones that connect through a router.

All the tested models came with the appropriate cables.



USEFUL FEATURES

- Look for large, clearly labelled keys and a backlit keypad for good viewing in poor light.
- A colour screen can be useful to read your contacts and to see who is online to talk to.
- If you live in a large house with more than one level, a phone that supports multiple handsets is useful, so you can have one on each floor. Alternatively you can look for a model that has a dial pad and speaker on its base, so you can also make calls from there.
- If you tend to make long calls or need to take notes, a **headset connection** on the handset can be a handy feature.



For a couple of dollars a month you can use a SkypeIn feature whereby you're issued with an eight-digit number and area code that operates just like a normal landline number. However if you have a dual-mode phone, all you need to do is use the landline number you already have for incoming calls.

For more on Skype, see *The Skype's the limit on* page 25 of this issue.

MS Windows Live Messenger

Microsoft (MS) Live Messenger is popular online chat software that comes with every copy of Windows XP and Vista operating systems. You can also download it free from www.microsoft.com.au. Once you register for the service, you can use your email address as a voice contact.

The PHILIPS VOIP4331B and UNIDEN WIN1200 phones support this VoIP service, which lets you talk to another MS Messenger user directly from the handset, or to anyone else using the normal landline connection. The other user can be either online sitting at their computer or using their own dual-mode MS Messenger phone and walking around away from their computer.

You can also receive email and Internet Messaging (IM) notifications on the phone, as well as seeing which of your contacts are available to speak to online. Although you don't need to be at your PC to use one of these phones, the PC does need to be on and connected to the internet for the service to work. Also, these phones aren't compatible with an Apple computer.

Any other VoIP (SIP)

The top-scoring DUALPHONE 3081 and the D-LINK DPH-C160S use Session Initiation Protocol (SIP) to provide VoIP services. To use these phones, you need to add the VoIP feature onto your internet plan and get configuration information from your ISP to enter into the phone. Before you consider one of these phones, contact your ISP to see if they offer this service; most of the popular ISPs, such as iiNet and AAPT, provide support for SIP.

The initial configuration for these two phones is more complex than for the other models, but once it's set up you use it just like a normal landline phone by simply dialling a phone number, unlike the contact names used for free Skype and MS Messenger calls. The charge for a landline call to any other landline in the country is normally around 10 cents (unlimited), and you also get cheap per-minute rates for international calls.

These phones don't support the VoIP services of either Skype or MS Messenger but can be configured to work on an Engin plan.

What to buy \$

DUALPHONE 3081	\$399
PHILIPS VOIP3211S	\$130
PHILIPS VOIP4331B	\$160

The DUALPHONE not only performs strongly as a dual-mode phone, you can also get information such as weather, stock market and sports reports sent to your handset. However, check with your ISP before buying to see if it'll work with your internet plan.

If you don't mind having to have your PC on when making a VoIP call, either PHILIPS model should satisfy your requirements. The only choice to make is whether to go with the Skype or MS Messenger model, and that'll be determined by what most of your friends use.

Engin

Engin (www.engin.com.au) is an Australian VoIP service that offers plans with different levels of equipment. Its main advantage is that you can get a regular phone number, unlike the contact names used in free Skype and MS Messenger; people can call you no matter what VoIP service they use.

The basic Engin service is \$9.95 per month. It comes with 'softphone' software that works much the same as Skype, including the ability to call regular phones. It's one of the few services offering a flat-rate charge of 10 cents, independent of how long you talk, for local calls and calls between interstate capitals.

It's also possible to use the Engin service with your current analogue landline phone, using an analogue telephone adapter or ATA (supplied by Engin) to convert your voice into digital data and send it over the internet through your modem or router.

Some VoIP limitations

Unavailable numbers Some VoIP providers don't support calls to Australian 1800, 1900 or 13 numbers and there's also limited support for 1800 numbers overseas.

Power failure will almost certainly render your internet modem and VoIP device inoperable. However, this is also true of normal cordless phones, so keep a corded phone in a cupboard for emergencies. In this situation, your mobile is only useful as long as its current charge lasts.

Network outages Although broadband has increased in speed and quality over the past couple of years, there's no guarantee of availability or 100% quality, due to communication outages or congestion beyond VoIP's control. This means, if your VoIP doesn't work, there's not really anyone you can contact to voice your concerns. >

Skype is free to download and there's neither a setup nor a subscription fee when talking to other Skype users.

All the models can quickly tell which type of call is to be made, and have ringtones that signal whether it's a landline or VoIP caller.

What to buy



DUALPHONE 3081

PRICE \$399

TYPE Any VoIP

GOOD POINTS

- Your computer doesn't need to be on for VoIP to work.
- Compatible with PC and Mac computers.
- Speakerphone.
- Can display information services from the internet, such as the weather and stock market reports on the colour LCD screen.
- Wall-mountable base.
- Easy-to-follow menu.

BAD POINTS

- No paging function.
- No backlit keypad.
- Initial setup can be complex.
- Heavy handset.



PHILIPS VOIP3211S

PRICE \$130

TYPE Skype only

GOOD POINTS

- Good sound quality.
- Alarm.
- Backlit keypad.

BAD POINTS

- Your computer needs to be on for VoIP to work.
- Mono display.
- VoIP only works between Skype users.
- Doesn't work with Apple computers.

USING THE TABLE

Scores The overall score is made up of:

- VOIP score: 20%
- Sound quality score: 20%
- Range score: 20%

• Ease of use score: 20%

• Battery score: 20%

All the phones in this test come with NiMH rechargeable batteries.

Price are recommended retail, as of December 2007.

PRODUCT	TYPE	PERFORMANCE									
Brand / model (in rank order)	Phone system	Computer on for VoIP to work	Overall score (%)	VOIP score (%)	Sound quality score (%)	Range score (%)	Ease of use score (%)	Battery score (%)	Talk time (hours: minutes)	Standby time (days)	Recharge time (hours: minutes)
Dualphone 3081	Any other VoIP	✓	79	77	80	85	82	71	9:30	10	7:15
Philips VOIP3211S	Skype only	✓	78	79	81	72	80	76	17:00	8.5	12:00
Philips VOIP4331B	MS Messenger only	✓	76	75	81	72	75	76	17:30	8	11:00
Dualphone 3088	Skype only		71	72	76	46	82	81	16:00	8.5	4:30
Linksys iPhone CIT400	Skype only		71	74	78	72	77	53	14:30	4	12:30
Oricom IP800	Skype only	✓	71	75	78	52	75	74	17:00	8	12:00
Doro 635IPW	Skype only	✓	69	70	74	59	68	72	16:00	8	12:00
Netgear SPH200D	Skype only		69	74	78	59	70	63	15:00	6	11:30
Uniden WIN1200	MS Messenger only	✓	62	75	79	39	70	46	7:00	5.5	10:30
D-Link DPH-C160S	Any other VoIP		59	67	72	26	66	65	12:00	7	7:00
Engin VOIP 121 (A)	Engin only		58	69	74	26	59	60	18:00	3	7:30



PHILIPS VOIP4331B

PRICE \$160

TYPE MS Messenger only

GOOD POINTS

- Speakerphone.
- Easy-to-follow menu.
- Additional features (reminder, stop watch, etc).

BAD POINTS

- VOIP only works between MS Messenger users.
- Your computer needs to be on for VoIP to work.
- Doesn't work with Apple computers.

TABLE NOTES

- (A) Discontinued, but may still be available in some shops.
 (B) Internet connection needs to be on to access contacts.

About the rest

All but the LINKSYS scored fairly poorly for range, but in a smaller home that's not a problem. Our testers made notes about some models:

- If you want to use Skype and don't want to keep your computer on all the time, the LINKSYS is worth considering, though its battery gives a shorter talk time and standby time than most other models.
- Only the LINKSYS and NETGEAR let you use Skype on a Mac.
- Of the USB-connection models with Skype, the ORICOM is the cheapest option. It's a good all-round performer, but the mono screen makes it more difficult to read contact details and online status.
- The UNIDEN only talks to users of MS Messenger, but this is fine if most of your online contacts use it too. It's easy to use, has good sound quality and could be a good option for a flat or small house.
- The ENGIN phone tested didn't score well (and was discontinued as we went to press), but if you like a normal monthly billing system, you might want to consider other Engin phones.

HOW WE TESTED

- For the VoIP score, our testers made calls from the tested phone in VoIP mode to another VoIP phone, as well as to a normal landline.
- They assessed speech clarity and volume, line noise and background noise reduction on each model, with a panel of three users making calls in a moderately noisy environment.
- To test range, the testers took each phone outside a brick house, leaving the base inside with no direct line of sight, and measured how far away you could still have an intelligible conversation.
- For ease of use, they considered factors such as how clear the instruction manual is, feel and comfort of the handset, how easy it is to clean, if the LCD screen is easy to read and any special features.
- For the battery life test, they set the phones to talk and to standby and timed how long they ran. They also tested recharge time.

FEATURES											CONTACT AND PRICE	
	Backlit keypad	Display	Key lock	Handsets supported	Phonebook contacts	Headset connection	Ringtones	Polyphonic ringtones	Ring volume settings	Works with a Mac	Contact	Price (\$)
		Colour	✓	8	100	✓	10	✓	6	✓	www.dualphone.com.au	399
	✓	Mono	✓	4	50	✓	10	✓	6		www.philips.com.au	130
	✓	Colour	✓	4	100	✓	3	✓	6		www.philips.com.au	160
		Colour		6	200	✓	10	✓	5	✓	www.dualphone.com.au	299
	✓	Colour	✓	4	500 (B)	✓	16	✓	5	✓	www.linksys.com.au	230
		Mono	✓	5	50	✓	10	✓	6		www.oricom.com.au	99
	✓	Mono	✓	4	160		9		5		www.doro.com.au	130
	✓	Colour	✓	4	500 (B)	✓	16	✓	5	✓	www.netgear.com.au	259
	✓	Colour		1	100	✓	24	✓	3		www.uniden.com.au	199
		Mono		5	50	✓	9		9	✓	www.dlink.com.au	270
		Colour		5	50		9		5	✓	www.engin.com.au	129



In the zone

Is your fridge keeping your food safe?

nutshell

► All the indoor/outdoor-type thermometers worked well. They're designed to let you measure two temperatures at the same time — usually inside and outside your home, but in this case in the fresh-food and freezer compartments of your fridge.

To keep food safe to eat, you need to keep it chilled at below 5°C, or frozen at or below -18°C — any warmer and you significantly increase the potential for harmful bacteria growth. Measuring the temperature in your fridge allows you to accurately set the controls so as to get the best quality and longest storage times for your food, and may even help reduce your household's CO₂ emissions. We calculated that a current-model freezer, running just four degrees colder than is needed (-22°C instead of -18°C, say), could produce around an extra 138 kg of CO₂ emissions per year.

CHOICE tested 24 thermometers of varying types, costing from \$5.70 to \$39.50, to find out which give the most accurate readings. We included in the test any thermometer we found in shops for under \$50 that can measure temperatures from around -20°C to ambient, and would fit easily into a fridge.

Which type is best?

- All the indoor/outdoor thermometers worked well and are very good for setting fridge and freezer temperatures because both compartments can be measured at once. For best results, put the remote temperature sensor between some food items. You need to tape a wire between the fridge and freezer to measure both compartments at once, however, which can be unsightly.

- Most of the digital thermometers with a probe also worked well and are easy to set up. You put the probe between food items or in a small bottle of water, and the temperature's shown on a digital readout. They can't be used permanently in the freezer, though, as the batteries can stop working, unless, like the DURATECH (see below), the probe is separate from the display.
- Most simple air thermometers, which have a dial with a needle showing the temperature, were inaccurate. Only one model made the *What to buy* list. However, an alternative could be the DURATECH Thermometer Module LCD XC0224 with alarm and probe (\$39.50): it was consistent across three samples and is easy to set up inside the fridge with the probe in a tumbler of water. But you'd need two units to measure the freezer and fridge temperatures at the same time, and the display section can't be left in the freezer. You need to run the wire underneath the freezer door seals and put the readout on top of the fridge or tape it to the side. ■



FRIDGE TIP

Fridge temperatures vary as the motor runs and stops, when the door's opened, and when warm food is added, so it's best to check the temperature several times to get a reliable reading.

What to buy \$

ATECH Thermo Equipment In-Out Thermo QM 6326

PRICE \$19.95

GOOD POINTS

- Accurate.
- Consistent across three samples.
- Easy-to-read dual display.
- Can be set up to monitor the fridge and freezer at the same time.

BAD POINTS

- You need to run a wire between the fridge and freezer, a look you may not like.



HOW WE TESTED

Three samples of each thermometer were tested for:

Temperature accuracy and consistency between samples Thermometers whose sensors could be immersed were tested in a calibrated fluid temperature bath at a range of temperatures that mimic the inside of a fridge and a freezer. The others were checked in temperature-controlled environments.

Response to changed temperatures The response speeds of each thermometer for both cooling down and warming up were checked.

Ease of use Evaluations included ease of reading and understanding temperatures, ease of being alerted to temperature problems and ease of setting up.

CHOICE Books

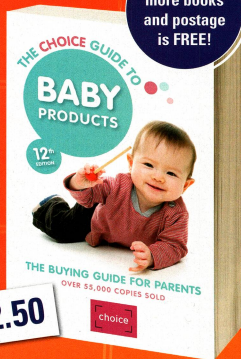
The CHOICE Guide to Baby Products **NEW!** 12th Edition

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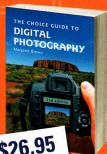


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4th Edition

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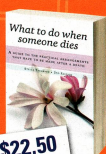


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Nowadays there are so many product recalls we may not be able to print all of them in CHOICE. For comprehensive recall information go to the Product Recalls Australia website: www.recalls.gov.au. If you don't have web access, call the Product Safety Policy section of the ACCC on 02 6243 1262.

Companies often rent 1800 numbers for a couple of months after a recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

DISHWASHER ■ Electrolux has recalled Dishlux, Dishlex and Westinghouse dishwashers sold since April 2007. The following models within a serial number range of 70700000 to 72400000 are affected: **Electrolux EX4001SB** and **ESL6163**; **Dishlex DX303SK** and **DX303WK**, and **Westinghouse SB908WK**, **SB908SK**, **SB916WK**, **SB916SK**, **SB926WK** and **SB926SK**. The model and serial number can be found on the right-hand side of the inner door panel.

The problem A wire connector may overheat and cause a fire or melting of the plastic components in the control panel.

What to do If you have an affected model, don't use it while it's unattended, don't use the delayed start program, and switch it off at the power point when the cycle is finished. Call 1800 001 218, Monday to Friday, 9 am to 6 pm, and on weekends 8 am to 1 pm, EST, with your dishwasher's model and serial number ready. A service technician will call and check your appliance free of charge.

TOY ■ Moose Enterprise has recalled **Bindeez Beads** toy range, comprising 22 products containing Bindeez Beads.

The problem Children may become ill if the beads are swallowed.

What to do Remove them from the reach of children. Return them free of charge to Bindeez Returns, Reply Paid 683, Thomastown 3074, including your name and contact details, to receive a refund. For more information call 1800 303 895 or go to www.bindeezrecall.com.au.

TOY ■ Mattel has recalled **Fisher-Price Laugh and Learn 2-in-1 Learning Kitchen**, product number L5887, which can be found on the base of the kitchen unit. The kitchen has two sides to play with and includes a fridge, sink and clock.

The problem Small pieces of the tap and the hands of the clock pose a choking hazard to children if they detach from the kitchen unit.

What to do Remove it from the reach of children. To see if your unit is affected, contact Mattel by going to www.service.mattel.com and clicking through to Australia, emailing Mattel at infoaustr@matel.com or calling 1800 674 753, Monday to Friday, 8 am to 5 pm. You'll be advised how to return the product to Mattel for a refund, or how to receive a replacement kit to correct the problem.

TOY ■ Toys 'R' Us has recalled the brown and white boat in the **Imaginarium City Tower Train Set**, sold by Toys 'R' Us between 1 September 2007 and 28 September 2007.

The problem The surface paint on the boat may contain lead.

What to do Remove the boat from the reach of children. Either return the boat to a Toys 'R' Us store to exchange it for a new boat, or post it free with

your contact details to Toys 'R' Us Support Centre, Reply Paid 84272, Locked Bag 7, Regents Park 2143 and a new boat will be posted to you.

TOY ■ Spotlight has recalled a battery-operated **Automatic Toy Pistol Shoot-Out XKS Powerful**, sold since September 2006.

The problem The attached laser sight may cause harm if shone into the eye.

What to do Remove it from the reach of children. Return it to your nearest Spotlight store for a refund.

TOY ■ Energizer Holdings has recalled **Disney Pirates of the Caribbean Medallion Squeeze Light**, product code 4891138900425, sold in Kmart stores nationally between September 2006 and October 2007.

The problem The leather strap attached to the medallion squeeze light may contain lead paint.

What to do Remove it from the reach of children. Return it by post to Pirates of the Caribbean Medallion Recall, Energizer Australia Limited, 1 Fittie Drive, Homubush Bay 2127, for a refund, including postage and handling costs. For more information call 1800 810 310.

TOY BOX ■ Caprice Australia has recalled **Wooden Toy Box**, sold in Spotlight stores, with product code numbers 931493538562, 9314935385363, 9314935385271 and 9314935385455.

The problem The omission of a slow-release spring may cause the lid to close involuntarily.

What to do Stop using it. Return it to the place of purchase for a refund or for more information call 03 9597 7000.

DRILL ■ Nitto Kohki has recalled **Atra Ace W30-3200 Magnetic Base Drill**, an electrically operated portable steel drilling unit manufactured in Japan, and sold in Australia between 15 March 2007 and 10 September 2007. The model number can be found on the side of the body sub-assembly.

The problem Electric leakage from one of the screws located on the top of the drill motor cover may cause an electric shock.

What to do Stop using it. To arrange for a test to be conducted on the drill, call 07 3340 4600 between 8 am and 5 pm, Monday to Friday, EST, and a circuit tester will be sent to you, or a company representative will visit to test the machine.

CHRISTMAS DECORATION ■ Woolworths has recalled **Woolworths Christmas Collection 15" (38 cm), Inflatable Snowing Globe — Santa/Snowman**, model number 8030039. It was sold through Woolworths, Safeway and Food For Less stores between 1 October 2007 and 25 October 2007.

The problem It contains small polystyrene beads that pose a choking hazard to young children if released from the product.

What to do Remove it from the reach of children.

Return it to your nearest Woolworths, Safeway or Food For Less store for a refund, or for more information call 1800 638 434.

BEANBAG ■ Slumber Trek Australia has recalled **Sesame Street, Elmo-shaped beanbag**, product number 9335603001927, sold in Kmart stores between 10 September 2007 and 15 October 2007.

The problem The warning label isn't securely attached to the beanbag, and the beanbag doesn't comply with the safety standard.

What to do Return it to your nearest Kmart store for a refund, or for more information call 03 9899 0555 or email contact@slumbertrek.com.au.

WATER PUMP ■ Pentair Water Australia has recalled **Onga Pump VF150**, serial numbers 1006 C00001 (built in October 2006) to 0107 C02232 (built in January 2007), and sold since October 2006. The serial number can be found on the rating label attached to the body of the motor.

The problem A potential fault in the motor housing may allow water to enter the motor windings, creating the potential for an electric shock to the operator.

What to do Don't use it, and disconnect the power source. Return it to the place of purchase for a replacement, or for more information call 1800 881 173, Monday to Friday, 8:30 am to 5 pm.

MICROPHONE ■ Australian Discount Retail has recalled **Microphone Cordless HS798**, product number 9338195247445, sold in The Warehouse — Where Everyone Gets a Bargain, Go-Lo, Makro Warehouse and Crazy Clark's between 19 August 2007 and 3 October 2007.

The problem The operating frequency extends into the aeronautical air navigation band, which could interfere with aviation safety.

What to do Stop using it. Return it to any The Warehouse — Where Everyone Gets a Bargain, Go-Lo, Makro Warehouse or Crazy Clark's stores for a refund, or for more information call 1800 254 687 or email merchandise.compliance@adrt.com.au.

BAMBOO TORCH ■ Australian Discount Retail has recalled **Citronella Bamboo Torch S/2**, 72 cm, sold in a pack of two through Crazy Clark's stores, Makro Warehouse stores and Go-Lo stores between 1 August 2005 and 8 October 2007.

The problem It doesn't meet the safety standard for candle accessories, and the bamboo may ignite and continue to burn for more than five seconds when the flame is applied.

What to do Don't use it. Return it to any Crazy Clark's, Makro Warehouse or Go-Lo store for a refund, or for more information call 1800 254 687 or email merchandise.compliance@adrt.com.au.

+ RISKY UNREGULATED PRODUCTS

Debentures: unlisted, unrated and unreliable

Debentures look and sound like common fixed-term deposits, but they differ markedly from prudentially regulated products offered by banks and credit unions.

Debentures are a way for companies to raise money from the public, to fund activities such as property developments, or to lend to companies that can't get finance from other sources. As with a fixed-term deposit, consumers invest in a debenture for a fixed term, receive regular fixed-interest payments and redeem the capital at the end of the investment period. However, there's no regulatory oversight of the financial viability of the companies that issue debentures, and no guarantee that the capital investment will be recoverable.

Many who lost money in the Fincorp, Westpoint and Bridgecorp debenture collapses had little or no idea of the inherent riskiness of their investments. It took these major collapses and thousands of people to lose their retirement incomes for debentures to capture government and regulatory attention. The Australian Securities and Investments Commission (ASIC) recently issued a consultation paper outlining its approach to improving the way debenture issuers disclose the facts about their products.

CHOICE welcomes ASIC's detailed analysis of the debentures market, and supports the proposals for increased risk management and reporting requirements on debenture issuers. Our submission to ASIC also supports the regulator's proposal for greater scrutiny of marketing and promotional materials produced by debenture issuers, including

prohibitions on the use of terms such as 'secure', 'safe' and 'guaranteed'.

However, we're concerned the proposals don't go far enough to allow consumers to distinguish between regulated and unregulated companies issuing debentures. Banks, building societies and credit unions are regulated by the Australian Prudential Regulation Authority, and there are significant controls over their financial stability and the risk of their investments. As a result, term deposits issued by these institutions are much safer than debentures issued by unregulated firms, even if they're both fixed-interest investments.

Unfortunately this significant regulatory difference is unknown to many investors, and it hasn't helped that debenture issuers such as Fincorp heavily promoted the idea of safety and security. In effect the debenture issuers have been 'free riding' on poor public understanding of prudential regulation in Australia.

CHOICE thinks this issue needs to be addressed as a matter of urgency. Consumers should be able to tell immediately whether a deposit product comes from a prudentially regulated bank or an unregulated company. They'd then be much better placed to make a decision about risk and return. So we want ASIC to develop a mechanism to enable consumers to immediately differentiate between unlisted, unrated debentures and less risky deposit products. ■

Consumers should be able to tell easily whether a deposit product comes from a regulated bank or unregulated company.

+ CAUSING CONFUSION

Green claims

GREEN?

Consumers should be able to choose more environmentally sustainable products, services and businesses, without fearing false or misleading information. With this in mind, the Australian Competition and Consumer Commission (ACCC) announced in late 2007 that it intends to ramp up its activities to make sure green claims comply with the Trade Practices Act. It's not hard to find examples of confusing claims; for example:

- In *Consumer News* this issue, CHOICE draws attention to carbon offsets — a growing but largely unregulated and confusing market.
- Recently Woolworths Select tissue products were withdrawn and relabelled because they had an uncertified 'Sustainable Forest Fibre' stamp — from a supplier that created the label itself.

So CHOICE is watching out for green statements that are vague, confusing, false or misleading. We'll investigate some of these and publish the results. And we want your help. For more information, see choice.com.au/greenclaims. ■

TELL US WHAT YOU'VE SPOTTED

Have you come across a dodgy green claim? One you find vague, confusing, false or misleading? Submit your story at choice.com.au/greenclaims or write to Dodgy Green Claims, 57 Carrington Road, Marrickville 2204.

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How to use this index

Bold type indicates a test, survey or trial report, unbold type indicates other articles.

* Indicates an update of a previous report, additions or corrections to reports, small follow-up items, letters or recalls.

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The prize for best entry goes to R Ishinjerro for the enigmatic cabbage dumplings. Thanks also to N May, R Devenish, R Dungan, G Loughnan, F Walker, O Stephenson, H Indorato and D Thatcher for their contributions to this month's **Hard Word**.

If you have any examples you think deserve to be on this page, send them to *The Hard Word*, CHOICE, 57 Carrington Road, Marrickville 2204. Please don't email us your entries — we need the originals.

Beef-sicle

Summer getting you all hot and bothered? An icy-cold McDonald's McOz burger could be just what's needed to beat the heat. According to the blurb on the wrapper, the snap-frozen patty is simply seasoned with a dash of salt and pepper before it's served on a bun.

IT STARTS WITH BEEF, SOURCED FROM AUSSIE FARMERS, THEN THE BEEF IS MINCED, MADE INTO PATTIES AND SNAP-FROZEN (WHAT WAY WE DON'T HAVE TO USE ANY PRESERVATIVES). WE THEN ADD A DASH OF SALT AND PEPPER, JUST BEFORE SERVING THAT PATTY ON A BUN MADE FROM AUSTRALIAN-GROWN AND MILLED WHEAT. SO IF YOU'VE EVER WONDERED HOW THAT 100% PURE AUSTRALIAN BEEF PATTY ON YOUR BURGER CAME TO BE... NOW YOU KNOW!

COOKED CABBAGE DUMPLING (白菜三鲜饺)

INGREDIENTS: FLOUR, CABBAGE, SUGAR, SALT, AND SO ON.

Price: \$4.99

Contains stuff and all that ...

Crispy Mango

nothing but fruit

NO preservatives NO artificial colours
NO added sugar NO artificial flavours



Just add water?

Turning these dried mango pieces into a mango hedgehog and an unpeeled mango — as per the serving suggestion — would require more than just a bit of water and a good chef. A time machine, perhaps? Ditto these sultanas into grapes.

dishwasher safe

Can be taken apart into 2 pieces

\$4.99

Camping Cutlery

Getting away from it all?

Boy, camping's getting sophisticated these days. It seems only recently that kitchen sinks started popping up next to the four-bedroom tents (complete with separate dining room, lounge and ensuite with spa...). Now, apparently, *dishwashers* are de rigueur. And here's the cutlery for them.

New Guinea Impatient Plants

Easy to grow with spectacular, brightly coloured flowers.



A garden in a hurry

These plants just can't wait to start flowering.

WATERFRONT

Actual View

WOLFIE'S

FUNCTION CENTRE & RESTAURANTS

Sydney's Sensational Location - On the Water at the Rocks

Global warming?

It seems Sydney's Opera House is now an island. A victim of rising sea levels?